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Results of an environmental chamber study and three basic studies pertaining to the chemistry of air pollution are described. Results obtained during the last four years of a long-term program designed to provide data required for the validation of models for chemical transformations in air pollution are presented. A 5800-liter, Teflon-coated, evacuable, thermostatted chamber and a 25 KW xenon arc solar simulator were used for irradiations, under simulated atmospheric conditions, of various hydrocarbon-NO_x-air mixtures. Results from a total of 114 irradiations, employing representative alkanes, olefins, aromatics, and oxygenates, both singly and in two or multi-hydrocarbon mixtures, are reported. The experimental procedures and analytical methods employed in this study and the limitations and uncertainties in the data are discussed. The kinetics and mechanism of the gas phase reaction of hydroxyl radicals with o-cresol and methoxy benzene were studied over the temperature range 299-435 K using a flash photolysis resonance fluorescence technique. The reactions of O_3 with acetylene, methylglyoxal and a series of aromatic hydrocarbons were studied at 297 ± 2 K, and rate constants and product data are reported. The chemical ionization mass spectrum of peroxyacetylnitrate (PAN), a major component of photochemical smog, was obtained using both methane and isobutane as reagent gas and the results confirmed the commonly accepted structure for PAN, $CH_3(CO)OONO_2$.

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Final Report

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MECHANISMS OF PHOTOCHEMICAL REACTIONS IN URBAN AIR

Final Report

by

James N. Pitts, Jr., Karen Darnall,
William P. L. Carter, Arthur M. Winer and Roger Atkinson

Statewide Air Pollution Research Center
and Department of Chemistry
University of California
Riverside, CA 92521

Grant No. R-800649

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Atmospheric Chemistry and Physics Division
Environmental Sciences Research Laboratory
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ABSTRACT

Results of an environmental chamber study and three basic studies pertaining to the chemistry of air pollution are described.

Results obtained during the last four years of a long-term program designed to provide data required for the validation of models for chemical transformations in air pollution are presented. A 5800-liter, Teflon-coated, evacuable, thermostatted chamber and a 25 KW xenon arc solar simulator were used for irradiations, under simulated atmospheric conditions, of various hydrocarbon-NO_x-air mixtures. Detailed time-concentration profiles were obtained for a wide range of products as well as for the reactants employed. Results from a total of 114 hydrocarbon-NO_x irradiations, employing representative alkanes, olefins, aromatics, and oxygenates both singly and in two- or multi-hydrocarbon mixtures, are reported. Relative and absolute concentrations of the reactants were chosen on a factorial design basis. Several hydrocarbon-NO_x systems were also studied as a function of temperature, with added aldehydes or with added PAN. Chamber and light source characterizations, including determinations of O_3 lifetimes and of light and dark H_2O_2 decays, and measurements of the spectral distributions of the photolyzing light, were carried out. The experimental procedures and analytical methods employed in this study and the limitations and uncertainties in the data are discussed.

The kinetics and mechanism of the gas phase reaction of hydroxyl radicals with o-cresol and methoxy benzene was studied over the temperature range 299-435 K using a flash photolysis resonance fluorescence technique. In both cases the observed temperature dependence of the OH decays is attributed to both H atom abstraction by OH, and to OH radical addition to the aromatic ring, with the adduct predominately decomposing at higher temperatures. These data were used to derive rate constants and Arrhenius parameters for OH addition and OH H-abstraction for both systems.

The reactions of O_3 with acetylene, methylglyoxal and a series of aromatic hydrocarbons were studied at 297 $\pm$ 2 K, and rate constants and product data are reported.

The chemical ionization mass spectrum of peroxyacetylnitrate (PAN), a major component of photochemical smog, was obtained using both methane and isobutane as reagent gas and the results confirmed the commonly accepted structure for PAN, $CH_3(CO)OONO_2$.

This report was submitted in fulfillment of Grant No. R-800649 by the Statewide Air Pollution Research Center, University of California, Riverside, under the sponsorship of the U.S. Environmental Protection Agency. This report covers a period from January 1, 1974, to November 30, 1978, and work was completed as of November 30, 1978.

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1. INTRODUCTION

In recent years there has been a growing demand for reliable and cost-effective computer kinetic models of photochemical smog formation by air pollution control officials, atmospheric scientists and a variety of regulatory agencies, as well as by industry. Considerable progress has been made in obtaining the kinetic and mechanistic information required in the development of chemical mechanisms which adequately describe the complex chemical transformations in the polluted troposphere (1-7). Despite such progress and the increasingly sophisticated computer techniques available to modelers, there has remained a critical need for a data base sufficiently comprehensive and characterized to serve as a benchmark against which computer kinetic models of various complexities may be experimentally validated (4-12).

From July, 1973 through December, 1978, the Statewide Air Pollution Research Center (SAPRC) conducted an experimental program for the EPA involving the generation of an extensive set of environmental chamber data which can be used for validating detailed chemical kinetic models for photochemical smog formation. The photochemical experiments have consisted of irradiations of a number of representative alkanes, olefins, aromatics and oxygenates, both singly and in mixtures, in the presence of NO_x in air. In most cases, sets of experiments were done with varying initial hydrocarbon and NO_x levels; in many cases the effects of added aldehydes were studied. In addition, for the propene-NO_x system, the effects of temperature, varying the initial NO/NO_2 ratio and the addition of PAN was also studied.

For each experiment, detailed concentration-time profiles for the reactants and all of the identifiable products, both major and minor, were obtained. Physical parameters such as temperature, relative humidity and light intensity were also monitored. In order that this data have maximum utility for detailed model validation, attempts were made to control and characterize the conditions of these experiments to the maximum extent practical.

Results from the first 18 months of this program (July, 1973 through November, 1974) have been reported previously (13). These included the bulk of the chamber and light source characterization studies for this

program. Thus, efforts to characterize surface effects and determinations of ozone lifetimes, absolute light intensity, spatial homogeneity of light within the chamber, mixing and equilibration times and sampling rates were reported. Results from a set of preliminary experimental runs were also reported. Data were given for the propene-NO_x and n-butane-NO_x photooxidation systems and also for a study of the effects on these systems of variables such as added aldehydes, temperature and initial NO/NO_2 ratio.

The present report provides the results of the remainder of the experiments performed in this program. During the period covered by this report (December, 1974 through December, 1978), in addition to 114 photochemical runs and 52 associated actinometry experiments, further light-source characterizations, mainly determinations of spectral distributions, and several O_3 and H_2O_2 decay experiments were also performed. The experiments performed consist of the bulk of the SAPRC-EPA chamber program. Because of improvements in light source characterization and experimental techniques resulting from experience gained throughout this program, the later photochemical runs reported here can be considered to be better characterized. Thus, these supercede many of the earlier runs given in the previous report.

2. EXPERIMENTAL FACILITY AND PROCEDURES

A. Facility

The SAPRC evacuable chamber-solar simulator facility in its present configuration is shown schematically in Figure 1. Its design and construction have been described in detail elsewhere (13-16). The salient features of the evacuable chamber, the solar simulator, the pure air system and the data collection system are summarized below.

Evacuable Thermostatted Chamber. The SAPRC evacuable chamber is a cylindrical, aluminum alloy cell, 1.37 m in diameter and 3.96 m long (surface-to-volume ratio 3.41 m^{-1}), with the interior coated in FEP-Teflon. The ends of the chamber consist of Teflon-coated grid structures, each of which holds sixteen 33 cm x 33 cm quartz windows. Each window is individually Viton O-ring sealed to the grid, and the grids in turn are bolted to the ends of the chamber through O-ring sealed flanges. Thermal

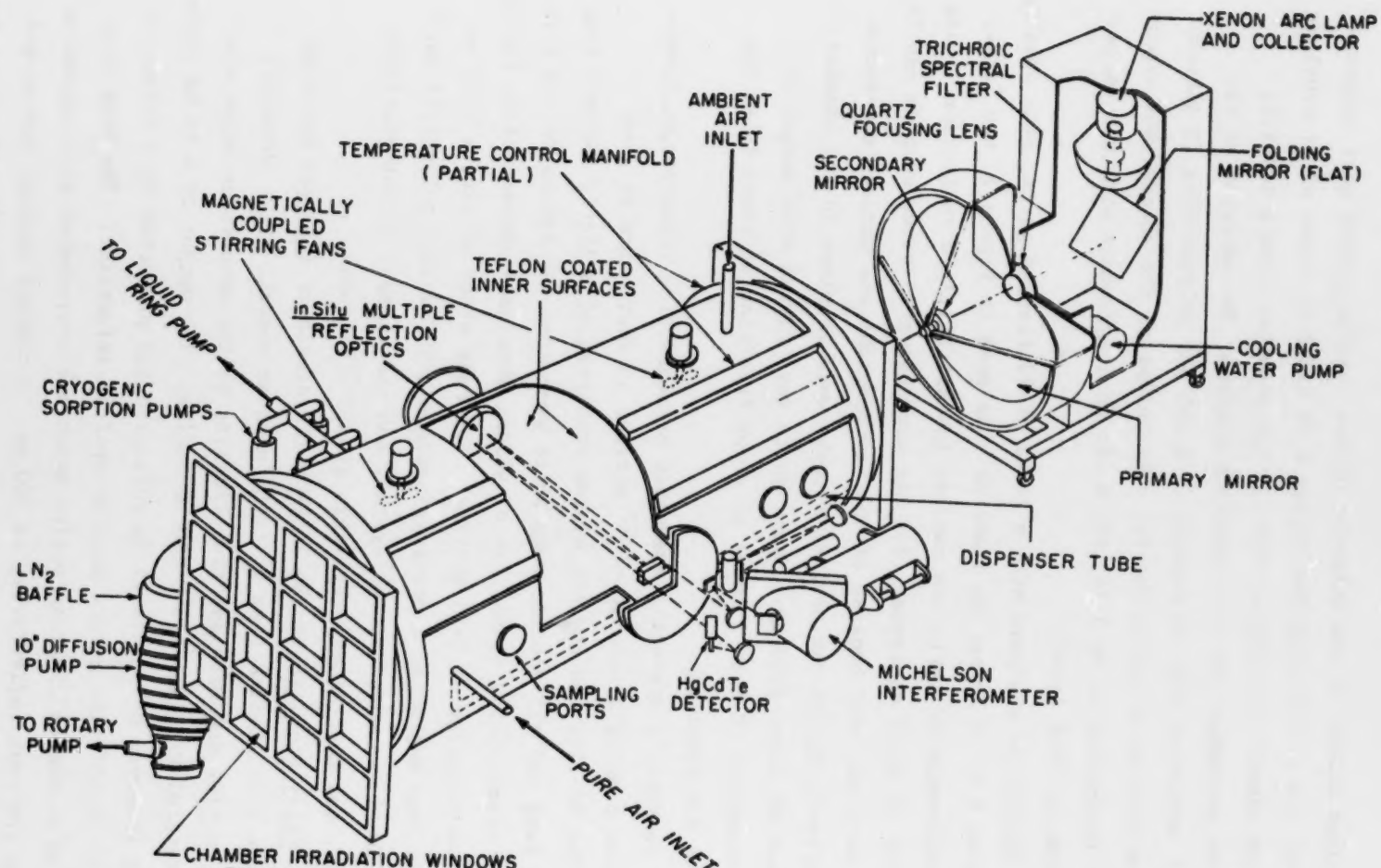


Figure 1. The SAPRC Evacuable Chamber-Solar Simulator Facility.

fluid passages welded to the exterior of the chamber permit wall temperature control (to ± 2 F) over the region 0 to 212 F by means of an ethylene glycol-water mixture circulated through the passages from a remotely located heat exchanger and refrigeration system. The exterior of the chamber is insulated with fiberglass (1 inch) and polyurethane (2 inches) and covered with an aluminum sheath. The volume of the chamber was experimentally determined to be 5774 liters, in good agreement with the calculated volume of 5860 liters.

The chamber is equipped with a total of 23 flanged ports, with openings ranging from 2 to 16 inches in diameter. As seen in Figure 1, two large, diametrically-opposed parts are used to install multiple reflection optics for in-situ IR or UV analyses. For the work reported here, such IR and UV analyses were not used because of the low reactant and product concentrations employed, though the optical mirrors were in place in the chamber during most of these studies. Small ports were fitted with Swagelock O-seal connectors (0.5 or 1 inch) to allow insertion of glass tubes for injections and sampling.

The chamber is presently evacuated by means of a three-stage, hydrocarbon-free pumping system to ~10^{-2} microns in four hours or less. Through Run EC-120, the pumping system consisted of a liquid (water) ring roughing pump and air ejector pump which evacuated the system to ~10 torr, and three cryosorption pumps, two of which, when used sequentially, further reduced the pressure to 1-20 microns. For runs after EC-120, a 25.4 cm diffusion pump employing a perfluorinated oil ("Fomblin" polyether) as a working fluid was added to the system, and the chamber is now routinely pumped to, and maintained overnight, at <10^{-2} microns.

Solar Simulator. The 25 KW solar simulator (15) was designed to provide a collimated beam of light with an overall light intensity uniform to ±10% and with spectral fidelity to the deep-space solar spectrum, particularly in the 300-450 nm region. The output of a 25 KW xenon arc lamp (Hanovia or Durotest) is collected and projected by a collector mirror via a 45° flat mirror onto an optical integrator. The beam then passes on to the collimating optics which are over-coated with magnesium fluoride for peak reflectivity at 300 nm. A compact optical system was obtained at the cost (due to the secondary mirror) of a "hole" in the beam

whose diameter ranges from 25 to 11 cm over the length of the chamber. The beam is collimated to a collimation half-angle of $\pm 1.1°$. Although this collimation angle requires a larger clearance between beam and chamber walls (beam diameter is 1.2 m) to minimize surface photochemistry, it also reduces the effect of shadows caused by the secondary mirror and the window grid structures. A trichroic spectral filter, designed to remove some of the energy in the near-infrared portion of the spectrum (800-900 nm), was placed on the input side of the optical integrator for most of the experiments reported here. To achieve a good simulation of the tropospheric spectral distribution, a 6.4 mm (0.25 inch) thick Pyrex pane is placed between the solar simulator and the quartz end windows of the chamber. Improved light intensity (as well as increased illumination of the shadowed areas) is achieved by use of Alzak reflectors on the panes at the far end of the chamber (13).

Pure Air System. Matrix air at a flow rate of 12-15 scfm is provided by an air purification system which has been described in detail previously (16). Ambient air is drawn through Purafil beds (to remove NO_x), compressed by a liquid (water) ring compressor to 100 psig, and passed successively through a heatless dryer, a Hopcalite tower (to remove CO) and a second heatless dryer packed with activated coconut charcoal. The latter acts as a pressure-swing adsorption unit and routinely reduces the hydrocarbon levels (as measured in the chamber) to 800 ppb methane, <5 ppb of C_2 hydrocarbons and propane and <1 ppb of all higher hydrocarbons. This very dry, purified air stream, after filtering to remove any charcoal dust, is heated, then divided into two metered streams, one of which passes through a spray tower supplied with heated distilled water. The streams are recombined in the appropriate relative amounts to give the desired humidity.

Data System. Data collection from continuous analyzers was accomplished by the use of a mini-computer data acquisition system based upon that developed by the Rockwell Science Center for the EPA-RAPS monitoring stations. The system is built around a PDP-8 computer with 16 K of core memory, and permits the continuous monitoring of up to 96 key station readouts. Data for O_3, NO, NO_2, NO_x, CO, temperature, relative humidity and relative light intensity (radiometer) were collected with this system and recorded on magnetic tape. The remaining data were prepared in

punched card form, and the two sets were processed using an IBM-360/50 or an IBM 370/155 computer.

B. Procedures for Photochemical Runs

Preparation of the Chamber. Prior to each photochemical run the chamber was evacuated (at ambient temperature) for at least 12 hours at pressures of $<5 \times 10^{-2}$ torr (Runs $\leq$120) or $<10^{-4}$ torr (Runs $\geq$121). Several times in this program, the chamber walls were further cleaned by an evacuated bakeout at >200 F, followed by ozone conditioning at 10-20 ppm (minimum of 12 hours). After Run EC-261, the chamber was further conditioned by performing "dummy" propene-NO_x-air irradiations (initial propene $\cong$0.5-1 ppm, NO_x $\cong$0.5 ppm) for at least four hours, following evacuated bakeouts and actinometry experiments. This was done so that the condition of the chamber following actinometry or evacuated bakeouts would resemble that following a regular photochemical run. Experience has shown that this is required to assure high reproducibility of replicate runs.

Pure Air Fill. Except as noted below or on the data sheets in the Appendix, the chamber was filled with air prior to injection of the reactants. To achieve the desired temperature and humidity of the matrix air for each experiment, the pure air system was turned on at least 30 minutes prior to use and the chamber temperature controller was set to the desired gas phase temperature. The humidified air stream was brought via a heating wire-wrapped pipe to a manifold at one of the chamber ports, and allowed to by-pass the chamber through a flow meter into a tube equipped with both a Brady array humidity sensor and a wet-dry bulb thermometer set. This arrangement allowed adjustment of both the humidity and temperature of the air stream to the desired levels before diverting the flow into the chamber.

The chamber was filled to a pressure of about 760 torr (about 25 torr above atmospheric pressure at Riverside) to allow installation of all sampling probes under positive pressure. Prior to Run EC-197, the chamber was then opened to the atmosphere via a filter cannister filled with equal volumes of Purafil, charcoal and indicating Drierite throughout the experiment. (Before each experiment, the cannister was backflushed with pure air). Beginning with Run EC-197, the makeup air was provided from a Teflon bag which was filled with purified air at the same temperature and humidity

as used in filling the chamber. After filling the chamber but before addition of the reactants, background levels of all species were determined and the total nonmethane hydrocarbon level was generally $\leq$80 ppbC.

Reactant Injections. Injections of reactants were generally made 45-60 min prior to the beginning of the irradiation, although in a number of cases, small supplementary injections for fine-tuning were made up to 30 min prior to the irradiation. In some cases, formaldehyde, acetaldehyde or benzaldehyde were expanded into the evacuated chamber prior to the pure air fill. These cases are noted on the data sheets in the Appendix.

Injections and dilutions of gas phase reactants were generally done using hypodermic glass syringes (B-D Yale 5, 10, 20 and 100 ml). Liquid reactants were generally injected by adding the desired volume of the liquid (using microsyringes) into a 1 liter glass bulb, whose contents were subsequently flushed into the chamber with N_2.

All reactants were obtained from commercially available samples with the exception of NO_2 and formaldehyde. NO_2 was prepared by reaction of NO with excess oxygen in a syringe. Formaldehyde was prepared by heating previously dried paraformaldehyde at 373 K under vacuum, passing the effluent through a trap at 179 K (methanol slush) to remove H_2O and other products, and collecting at 77 K (liquid N_2 trap). The desired pressures of formaldehyde were then expanded into a glass bulb of known volume, whose contents were subsequently flushed or expanded into the chamber.

The injection sequence was generally as follows: the injection tube was flushed with N_2, NO was added, the tube was flushed again with N_2, the remaining reactants (hydrocarbon, NO_2 and, for some runs, CO) were added, followed by a final flush with N_2. For some runs, adjustment to the desired NO_2 level was made by adding the necessary volume from the previously prepared sample of NO in O_2 as soon as a steady reading was obtained for NO and NO_2, after injection of NO. For runs before EC-230, reactants were flushed directly into the chamber. For Run EC-230 and those following, the system for injection of reactants was modified to include a 1.6 cm (I.D.) Teflon disperser tube which runs the length of the chamber. Employing this system reduced mixing times to ~10 minutes.

Irradiation Procedure. The solar simulator was brought to the

desired power level with the doucer in place at least 5 minutes prior to the start or irradiation. The chamber wall temperature control was switched to refrigerate at a setting of about 5 F below the desired gas phase temperature ~5 minutes before the run was begun in order to minimize the variation of the gas phase temperature due to the solar simulator heat load. During an experiment, a radiometer (EG & G Model 550) placed at the far end of the chamber facing the solar simulator is maintained within $\pm$0.02 mw/cm^2 of the value determined in the actinometry. Beginning with Run EC-106, the relative spectral distribution of the photolyzing light was determined at least once at approximately the middle of the run.

Sampling. Following the pure air fill, the continuous monitoring instruments for O_3 and oxides of nitrogen (see Section 3) were attached, and began to withdraw air from the chamber. The sampling rates for these instruments were measured periodically, and are reflected in the total sampling rates given for each run on the data sheets in the Appendix.

Sampling for formaldehyde, H_2O_2 and for GC or GC-MS analysis using Tenax trapping was done prior to the irradiation (reported on the data sheets as the T = 0 value) and, generally, at hourly intervals. Sampling times were usually 20 min for formaldehyde, 30 min for H_2O_2 and 15 min for Tenax trapping. Sampling rates were measured with calibrated rotometers and are reflected in the total sampling rates given on the data sheets for each run. For formaldehyde and H_2O_2, concentrations and volumes of gas samples are reported at the midpoint of the sampling time (except at T = 0, as noted above), while volumes and concentrations derived from Tenax trapping are reported for the beginning of the sampling time.

Sampling for chromatographic analysis (except for those using Tenax trapping) were done employing 100 ml syringes. The syringes were flushed 1 or 2 times (100-200 ml withdrawn) with air from the chamber before taking 100 ml for analysis. Samples for each type of chromatographic analysis were generally taken before reactant injections, after injections and before irradiation, immediately before the start of the photolysis and at regular intervals thereafter. The total number of such GC samples taken is recorded for each run on the data sheets in the Appendix, but its contribution to the total sampling rate was generally negligible.

C. Procedures for Actinometry Experiments

The determination of k_1 for photolysis of NO_2 in a nitrogen atmosphere according to the method of Holmes et al. (17) was used to determine the absolute light intensity in the evacuable chamber. Before Run EC-324, the solar simulator was brought up to the approximate desired power level before filling the chamber, and then was unshuttered briefly to allow adjustment of power to give the desired radiometer value. For Run EC-324 and those following, the solar simulator power was held at the set value used for the associated photochemical runs and the radiometer value was not adjusted. The solar simulator was shuttered and the chamber was filled with nitrogen of $\geq$99.995% stated purity level. Approximately 20 torr of vacuum-distilled NO_2 (<1% NO) in a 500 ml bulb was then flushed into the chamber with nitrogen.

After mixing was completed and constant initial values for NO and NO_2 were obtained, the solar simulator was unshuttered and a one or two minute irradiation carried out. Radiometer readings (with a 330 nm interference filter of 80 nm full-width at half maximum) were taken every 10 seconds during the irradiation, and solar simulator power settings (product of current and voltage panel meter readings) were recorded, at least initially and at the end of the irradiation. During this brief irradiation period, the light intensity did not vary significantly (<0.01 mw/cm^2). The final NO_2 concentration was allowed to stabilize ($\leq$20 min) after the end of irradiation. The formula of Holmes et al. (17), including the term to correct for the initial NO concentrations, was used to calculate the k_1 value (see Section IV-C).

3. ANALYTICAL METHODS AND PHYSICAL MEASUREMENTS

A. Temperature

The sample temperature was monitored with a radiation iron-constantan thermocouple inserted via a glass probe into the dark space in the center of the chamber, at the end remote from the solar simulator. A Doric Model DS-350 Thermocouple Indicator Type J provided temperature readout in degrees F with an accuracy of $\pm$2 F. Good gas phase temperature control ($\pm$2 F) was maintained during photolyses by setting the controller

4-5 F below the desired temperature. There was some radiation heating of the thermocouple probe even though it was located in the dark space in the center of the chamber and was further shielded by a foil cover. This has been estimated to be about 2 F by shuttering the simulator and determining the immediate temperature change. The data presented have not been corrected for this.

B. Relative Humidity

A Brady array (Thunder Scientific) mounted in a bulkhead fitting was used to measure relative humidity (RH). The response in volts (V) was converted to % RH using the calibration (at 85 F) function supplied by the manufacturer.

Substantially more variation occured in the relative humidity than could be accounted for by the changes in gas phase temperatures during an experiment. Prior to Run EC-197 some increase in RH might have been attributed to filtered makeup air which was not of the same water content. However, Runs EC-214 and EC-216, which showed similar increases in RH, were provided with makeup air identical to that used to fill the chamber initially. The Brady arrays used for this measurement were calibrated at 85 F and at that temperature were reliable to $\pm$5% RH. However, since the Brady was bulkhead mounted into a flange on the wall of the chamber, it may have been cooled to 80 F or less. Except as noted on the data sheets in the Appendix, the water content of the matrix was very well controlled at the time of the chamber fill, to be 50 $\pm$ 5% RH at 85 F. This was probably the best indicator of the water concentration present in the chamber.

C. Ozone

A Dasibi Model 1003 UV absorbance analyzer was used to monitor ozone (O_3). Prior to June, 1975, calibration was checked periodically using the 2% neutral buffered potassium iodide method (NBKI). However, this method was shown to yield ozone concentrations which were ~20-25% high at 50% RH (18,19), and since that time, calibrations against a UV standard have been performed. Ozone concentrations obtained with instruments calibrated by the NBKI method have been corrected by a factor of 0.8. The overall accuracy of the O_3 data is estimated to be $\pm$5%.

D. Oxides of Nitrogen

A TECO Model 14B chemiluminescence analyzer was used to monitor nitrogen oxides (NO, NO_2, NO_x). The instrument measures the chemiluminescence from the reaction of NO with O_3 which takes place in a reaction chamber maintained at reduced pressure. The response of the instrument is inversely proportional to this reaction chamber pressure. However, the reaction chamber pressure is instrumentally shown as reaction chamber vacuum relative to ambient atmospheric pressure. At a constant vacuum reading, as carried out in practice, changes in ambient room pressure will translate into reaction chamber pressure changes with an approximate four-fold percentage amplification. We have provided an additional valve and replaced the standard pump with a high capacity vacuum pump in order to regulate the reaction chamber vacuum to within $\pm$0.50%.

Calibration (20) was carried out using a modified CHAMP (Continuous Health Air Monitoring Program) calibrator, which is a flow dilution system with calibrated mass flow meters and an NBS standard NO calibration cylinder. Zero readings were set with medical breathing air during calibration, and with air passed through an MSA Type N filter between calibrations (ozone generator off). The TECO converter efficiency was checked using NO_2 generated by gas phase reaction of the NO and O_3 and was always found to be 100 $\pm$ 5%.

The analysis for NO_2 and NO_x is complicated by the fact that the converter converts organic nitrates (such as PAN and alkyl nitrates) and HNO_3 to NO (21). Since the conversion of organic nitrates is quantitative (21), NO_2 and NO_x data can be corrected by subtracting off the PAN and organic nitrate concentrations which were measured using independent methods. (Linear interpolation was made between PAN and nitrate data points since, in general, these data were taken less frequently than NO_x data). Unfortunately, HNO_3 was not routinely monitored, and the extent of HNO_3 interference is uncertain. Tests with nylon filters, which are believed to quantitatively remove HNO_3 (22), indicate that HNO_3 interference is significant in runs containing $\geq$2-5 ppm NO_x, but that it is probably negligible in runs with lower NO_x levels, such as those reported here. It appears that low levels of HNO_3 are removed by the walls of the sampling tube before entering the converter.

A comparison of the TECO 14B with the Bendix analyzer which had been calibrated in the same way showed analyses for NO_x to be generally within 10%. The accuracy for the NO_2 and NO_x measurements is primarily limited by uncertainties in PAN and alkyl nitrate measurements used in correcting for interferences, and the possibility of interference by HNO_3 or by unmonitored organic nitrates.

E. Formaldehyde

The chromotropic acid method (23) was used to monitor formaldehyde (HCHO). Samples were taken in a single bubbler containing 10 ml of distilled water at the rate of 1 ℓ/min. The developed solutions were read on a Bausch and Lomb Spectronic 20 formaldehyde (calibration #1 on the data sheets) and a Beckman 35 Spectrometer formaldehyde (calibration #2 and #3 on the data sheets).

The chromotropic acid method for monitoring formaldehyde has shown more unexpected and inexplicable results than any other analysis we use. The major problem during the period reported here was a series of anomalously low data for Runs EC-177 through EC-188 (EC-179 through EC-188 were done for another program and are not reported here). The cause is still not known; a possible explanation is the use of a different bubbler (a new one or one with a coarse rather than extra coarse frit). For some of the earlier experiments, the blank and low concentration samples showed considerable yellowing. It was later discovered that a residue was accumulating both in the volumetric flasks and in the cuvettes. By routinely using concentrated H_2SO_4 to clean all glassware (beginning before Run EC-216) this problem has been eliminated.

Recent calibration of the method, using accurately known HCHO concentrations in N_2 prepared in a high vacuum system and diluted down to concentration levels of $\gtrsim$100 ppb using a flow dilution technique, has shown the general reliability of our procedure, as used, to be $\pm$10-15% with $\geq$90% of the total HCHO trapped in the first bubbler. Good agreement was also obtained when known amounts of HCHO were injected into the EC prior to the pure air fill, provided that the disperser tube was not used (see data for Runs EC-336). When known amounts of HCHO were injected into the chamber using the disperser tube (Runs EC-250 through EC-257),

the chromotropic acid measurements were only ~60% of the calculated values. This may be due to absorption on the walls of the dispersion tube, though problems with the chromotropic acid technique cannot be ruled out. The overall reliability of the HCHO measurements, beginning with Run EC-216 is estimated to be +10 to -30%.

F. Hydrogen Peroxide

Two procedures were examined for the determination of hydrogen peroxide. Initially, the Ti(IV)-8-quinolinol method for H_2O_2 determination (24) was attempted using various dilutions of a standard H_2O_2 solution. The "450 mμ" absorption maximum of the peroxy-titanium 8-hydroxquinolate complex was found to occur anywhere from 440 to 465 mμ, and poor reproducibility of absorbance values has prevented establishing a satisfactory calibration. This procedure was abandoned in favor of the titanium tetrachloride procedure of Pilz and Johann (25) which, though less sensitive, is manipulatively much simpler, with relatively few uncertainties being introduced in the course of developing the solutions. This procedure was applied for H_2O_2 determinations on Runs EC-247 through EC-257.

The $TiCl_4$ procedure was carried out as follows: A stock solution of $TiCl_4$ in concentrated HCl was prepared and was pulled through a fritted (very fine) funnel. A 25 ml aliquot of this was diluted 1:9 by the addition of distilled water each morning prior to the experiment. An air sample was drawn through an impinger containing 5-10 ml of the dilute $TiCl_4$ solution, usually for 30 minutes at 1 liter per minute. The exposed solution was transferred quantitatively to the appropriate size volumetric flask and brought up to volume with the dilute $TiCl_4$ solution. The visible absorption spectrum (700 to 350 nm) of the complex of $TiCl_4$-H_2O_2 was recorded using 5 cm pathlength semimicro cells. Calibrations with standardized H_2O_2 gave absorption coefficients in good agreement with that of Pilz and Johann (735 M^{-1} cm^{-1} at λ_{max} = 410 nm).

Because of the light scattering resulting from the formation of fine particulate in exposed samples (presumably TiO_2 in samples taken from the chamber), the use of the usual blank vs. blank reference spectrum tends to lead to overestimates of H_2O_2 concentrations. This can be seen in Figure 2, which gives spectra (normalized at 700 nm) of (a) the unexposed $TiCl_4$ solution, (b) a sample exposed to air containing no H_2O_2 (sample #1

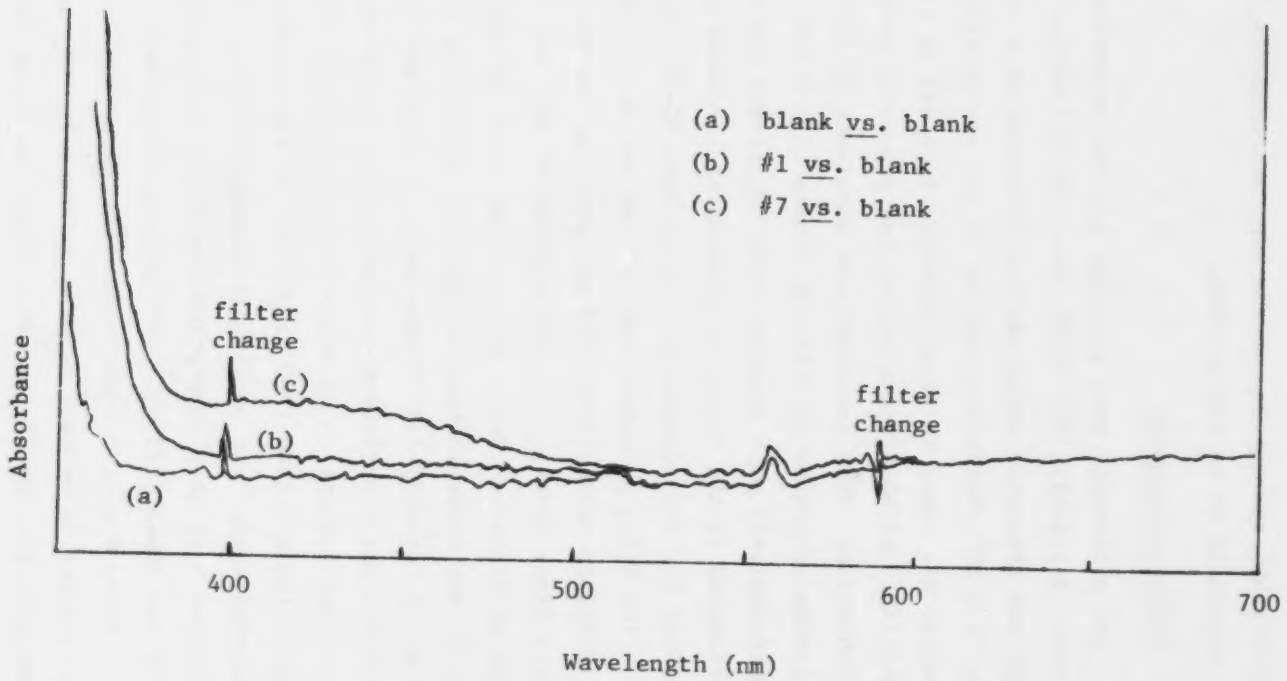


Figure 2. Absorption spectra of samples from the $TiCl_4$ method for monitoring H_2O_2 taken during EC-255.

is that taken prior to the start of the run) and (c) of a sample containing the $TiCl_4$-H_2O_2 complex at a concentration corresponding to 8 ppb H_2O_2 in air. The absorbance at 410 nm has been calculated for each sample relative to that in the #1 sample, each normalized to their respective values at 700 nm [i.e., $Abs^{\#n}_{410} = (A^{\#n}_{410}-A_{700}) - (A^{\#n}_{410}-A^{\#n}_{700})$].

It can be seen from the data sheets in the Appendix that generally no more than 13 ppb of H_2O_2 was determined by this method, the only exception to this being Run EC-247, in which 20 ppb H_2O_2 was observed. (This run also formed 0.6-0.7 ppm O_3, 2.5 times more than any other run in which H_2O_2 was monitored). The observed scatter in the data suggests a random uncertainty of at least $\pm$5 ppb.

G. Carbon Monoxide

A Beckman Model 6800 Air Quality Gas Chromatograph, which was calibrated daily, was used to monitor carbon monoxide (CO). The stainless steel (SS) standard CO calibration cylinder which has been used over the course of this work has shown a gradual (~1% per month) loss of CO, and beginning in January, 1976, the SS standard cylinder has been periodically cross-calibrated against a new aluminum standard cylinder. The CO data have been corrected for the decay of CO in the SS cylinder used here and are reliable to about $\pm$10%.

H. Organic Reactants and Products

Organic reactants and products were monitored by gas chromatography employing flame ionization (FID) or electron capture (ECD) detection. Brief descriptions of each system used, along with lists (in order of retention times) of compounds they were used to monitor, are given in Table 1. For selected compounds, approximate sensitivities obtainable during routine monitoring and approximate calibration accuracies are also given in the table. The techniques employed with the various systems, and the calibration techniques and special problems associated with the analysis of specific compounds using these systems are discussed below.

Table 1 also gives the designations for the compounds (or sum of compounds in cases of overlapping peaks) used on the detailed data sheets. Some compounds can be monitored by more than one system--in those cases, the Table indicates which column was most often used to derive the data

Table 1. Chromatographic Systems and Compounds Monitored by Each

GC System		Compounds Monitored[a]				
Abbreviation[b]	Description	Compound	Abbreviation[b]	Sensitivity[c] (ppb)	Calibration Uncertainty	Notes
PN	5' X 1/8" SS Porapak N; 60 C; FID	Methane	METHANE	7		
		Ethene	ETHENE	0.2	±2%	
		Ethane	ETHANE	0.2		
		Acetylene	ACETYLEN	0.2		
DMS	36' X 1/8" SS 10% 2,4-dimethylsulfolane on C-22 Firebrick, 0 C and 2' X 1/8" SS 10% Carbowax 600 on C-22 Firebrick; 0 C; FID	Propane	PROPANE	0.05		
		Propene	PROPENE			
		Isobutane	I-C4			
		n-Butane	N-C4	0.05		
		Neopentane	NEO-C5			
		Acetylene	(ACETYLEN)[d]	0.1	±2%	e,f
		1-Butene	1-C4=			
		Isobutene	I-C4=			
		Cis-2-butene	C2-C4=			
		Trans-2-butene	T2-C4=			
		2,3-Dimethylbutane	2,3-DMB	0.1		
10' C-600	10' X 1/8" SS 10% Carbowax 600 on C-22 Firebrick; 70 C; FID	Acetaldehyde	ACETALD	0.05	±25%[h]	g
		Ethylene oxide	(ETOX)[d]		-	
		Propylene oxide	PROX		±5%	
		Propionaldehyde	PROPALD			
		Acetone	ACETONE	0.05	±20%	
		Butyraldehyde	BUTYRALD		±5%	
		Methyl nitrate	(ME-N)[d]		-	e,i
		Methyl ethyl ketone	MEK	0.05		
		Ethyl nitrate	(C2-N)[d]			
		Benzene	BENZENE	0.02	±3%	
		Isopropyl nitrate	(C3-N-2)[d]	0.1		
		n-Propyl nitrate	(C3-N-1)[d]	0.1		
		Toluene	TOLUENE			
		2-Butyl nitrate	(C4-N-2)[d]		±10%	e
		1-Butyl nitrate	(C4-N-1)[d]			
		m-Xylene	M-XYL	0.1	±3%	

Table 1 (continued) - 2

GC System		Compounds Monitored[a]				
Abbreviation[b]	Description	Compound	Abbreviation[b]	Sensitivity[c] (ppb)	Calibration Uncertainty	Notes
PANALYZER	12" X 1/8" Teflon 5% Carbowax 400 on Chromosorb G; 28 C; ECD	Methyl Nitrate	C1-N	0.5	±5%[j]	
		Ethyl Nitrate	C2-N		±10%[j]	g
		2-Propyl Nitrate	C3-N-2		±20%[k]	
		2-Butyl Nitrate	C4-N-2		±20%[k]	e
		1-Propyl Nitrate	C3-N-1		±20%[k]	
		Peroxyacetyl Nitrate	PAN		±25%[l]	
		1-Butyl Nitrate	C4-N-1		±20%	
		2,3-Dimethyl Butyl Nitrate	(DMB-N)[d]		m	n
3-PART	10' X 1/8" SS 5%, 1,2,3-tris-(2-cyanoethoxy)propane and 5' X 1/8" SS 5% Bentone 34 + 5% dinonyl phthalate both on HMDS gas chrom W; 3' X 1/8" SS 10% Carbowax 600 on C-22 Firebrick; 65 C; FID	Acetaldehyde	(ACETALD)[d]	0.3	±25%	
		Ethylene oxide	ETOX	0.3	±15%	
		Propionaldehyde	(PROPALD)[d]	0.1	±15%	
		Acetone	(ACETONE)[d]	0.6	±20%	g
		Butyraldehyde	(BUTYRALD)[d]		-	
		Methyl ethyl ketone	(MEK)[d]	0.2	±5%	
		Toluene	(TOLUENE)[d]	0.6	±3%	
		m-Xylene	(M-XYL)[d]	0.1		
3' C-600	3' X 1/8" SS 10% C-600 on C-22 Firebrick; 90 C; FID	Benzaldehyde	BZALD	5.0	±100%	
5' C-600	5' X 1/8" SS, 5% C-600 on C-22 Firebrick; 90 C; FID	Toluene	TOLUENE	0.02	±5%	
		m-Xylene	M-XYL	0.03	±10%	
		Benzaldehyde	BZALD	0.5	±15%	
		m-Tolualdehyde	M-TOLALD	0.5		
SP-1000	6'X 1/4" X 2 mm ID glass; 0.1% SP 1000 on Carbopack C; temp. prog. 150 C → 250 C @ 20 C/min; FID; Tenax cartridge sampling	Benzaldehyde	BZALD	0.1	±10%	g
		Benzyl nitrate	-	0.1	-	
		o-Cresol	O-CRESOL	0.1	±25%	
		m-Cresol	M-CRESOL	0.1	±30%	e
		p-Cresol	P-CRESOL	0.2	±15%	
		o-Nitrotoluene	ONT	0.3	±10%	
		m-Nitrotoluene	MNT	0.4		
		p-Nitrotoluene	PNT	0.5		

Table 1 (continued) - 3

GC System		Compounds Monitored[a]				
Abbreviation[b]	Description	Compound	Abbreviation[b]	Sensitivity[c] (ppb)	Calibration Uncertainty	Notes
TENX-GC	10' X 1/4" X 2 mm ID glass; Tenax GC; temp prog. 100 C → 250 C @ 20 C/min; FID; Tenax cartridge sampling	Benzaldehyde + Benzyl nitrate	BZALDBZN	0.1 0.1	10%	g
		o-Cresol	O-CRESOL	0.1		
		o-Nitrotoluene	ONT	0.2	15%	
		m-Nitrotoluene + 2,3-Hydroxy nitrotoluene	MNT23HNT	0.2 0.2	40%	g
		p-Nitrotoluene + 4,3 Hydroxy nitrotoluene	FNT43HNT	0.2 0.3	20% 50%	g

[a] Partial list. Restricted to compounds observed in experimental runs given in this report.

[b] Abbreviations as used on data sheets.

[c] Sensitivity is defined as the approximate concentration which gives a signal/noise ratio of 2.

[d] Unless stated to the contrary on the data sheets, the data given for this compound on the data sheets was obtained using another system.

[e] Compounds indicated interfere significantly. The presence of large levels of one will make analysis of the other(s) more uncertain.

[f] Despite overlap, n-butane and neopentane can be reliabily monitored together if present in roughly equal quantities.

[g] Compounds indicated cannot be separated with this GC system.

[h] There is significantly less uncertainty if response by peak area is used.

[i] Because of overlap with butyraldehyde and methyl ethyl ketone, methyl nitrate is not monitored using this system.

[j] Calibration valid for concentration ≤ 10 ppb only. [k] Calibration valid for concentration ≤ 20 ppb only.

[l] Nonlinear calibration curve used. [m] No authentic sample available for calibrations.

[n] Interference by water peak prevents quantitative analysis of this compound on this system.

given on the data sheets, unless stated otherwise.

Aliphatic Hydrocarbon Analysis Using the Porapak N and Dimethylsulfolane Systems. The C_1 and C_2 hydrocarbons were monitored employing 5′ x 1/8" stainless steel columns packed with 100/120 mesh Porapak N held at 60 C. The N_2 flow was 80 ml/min. Two separate Porapak N (PN) systems were used throughout this program--one in each of our two chromatography labs. Acetylene and the C_3^+ alkanes and olefins were monitored employing 34′ x 1/8" stainless steel columns packed with 10% 2,4-dimethylsulfolane (DMS) on C-22 firebrick held at 0 C, in series with 2′ x 1/8" stainless steel "soaker" columns containing 10% Carbowax 600 on C-22 firebrick (30/60 mesh). As with Porapak, two separate DMS systems were used throughout the program. With one, the DMS support was 60/80 mesh and the N_2 flow was 26 ml/min; with the other, the support was 100/120 mesh and the N_2 flow was 50 ml/min. The DMS and Porapak N systems in both laboratories employed flame ionization detection.

The DMS and Porapak systems were calibrated by sequential quantitative dilutions of 2 ml of the pure gas (as measured by a 5 ml hypodermic syringe) or of 1-10 μl of the pure liquid (as measured by micropipet) into two specially designed ~2 liter flasks of accurately known volume (26,27). The precisions of the calibrations measured were generally ±3%.

With the exception of analysis for methane on the Porapak system, or analyses where higher concentrations (≥0.5-1 ppm) of reactants were monitored, 100 ml samples from the chamber were concentrated prior to injection using a liquid argon- or liquid oxygen-cooled 12" x 1/8" stainless steel trap (packed with 10% DMS on 40-60 mesh C-22 firebrick). The traps were then warmed with an ice bath (to attain a reproducible temperature) briefly, prior to the injection of their contents into the column. For methane or high concentration reactant analysis, a 2-3 ml loop was flushed with the 100 ml sample from the chamber, and its contents were injected directly into the column. Separate calibrations were done for "loop" and "trap" analyses.

The overall accuracy of these measurements is generally ±5%. This is supported by the fact that when analyses have been carried out on the same mixture using the two independently-maintained Porapak N or DMS systems, the results agree to within 10%. The aliphatic hydrocarbons all

gave a constant response per unit concentration over the range of concentrations studied.

Aromatic Hydrocarbon, Oxygenate and Organic Nitrate Analysis Using the 10′ C-600 System. For most runs analysis of aromatic hydrocarbons, aliphatic aldehydes and ketones and C_2^+ organic nitrates were monitored using a 10′ x 1/8" stainless steel column of 10% Carbowax 600 on C-22 Firebrick (100/120 mesh) operated at 70-75 C. The N_2 flow was held at 50.5 ml/min, and flame ionization detection was used. Sampling was carried out as described above, except that the trap for sample concentration was packed with uncoated glass beads. Calibrations for oxygenates and organic nitrates were generally done as described above. Aromatic hydrocarbons were calibrated by micropipeting 1 µl each of the aromatics of interest in pre-flushed ~50 liter bottles of accurately known volume, diluting this mixture by injecting a 20 ml aliquot into a ~2 liter flask, from which calibration samples were taken.

Calibrations were generally carried out with two to five compounds at a time, and these were chosen to avoid overlap of the GC peaks. With the exception of acetaldehyde, which will be discussed in detail below, the precision of the calibration measurements was generally excellent (±3%). Peak height was assumed to be a linear function of concentration over the range of concentrations found in these experiments, except for oxygenates. Estimates of calibration accuracy are given in Table 1.

Estimated sample measurement accuracy could approach ±2% under ideal conditions, but most measurements were considerably more uncertain. The major causes of sample measurement uncertainties were low yields (i.e., very small peaks) or interferences (i.e. peak overlap) with a compound present at a higher concentration. (Table 1 indicates which compounds suffer significant interferences in the chromatographic analyses). For example, for propene + n-butane runs, measurements of propionaldehyde and butyraldehyde were uncertain by 15-25% and measurements of propylene oxide and ethyl nitrate were uncertain by ±50%.

The acetaldehyde analysis has turned out to be particularly difficult to do accurately. The calibration is complicated by the fact that acetaldehyde is a very low-boiling liquid (BP = 21 C), making it difficult to handle in a quantitative way using the standard procedure of transferring

with a micropipet. In addition, it has a very assymmetrical peak shape, and the peak height can vary significantly from sample to sample, and as a function of concentration. The overall reliability of the acetaldehyde measurements has been determined on the basis of calibrations carried out recently using a flow dilution technique analogous to that used for HCHO calibration (see Section III-E), except that in this case, the diluted mixture of acetaldehyde in N_2 was analyzed from a 5.47 liter Pyrex bulb which had been flushed with this mixture for ~2 hours. Measurements of both peak area response and peak height response were made. Where possible, peak areas were determined for samples taken during the runs reported here, and estimates of accuracy based on comparison of concentrations obtained from peak heights vs. peak areas are given in Table 2. Because of the attenuation required to observe the propene oxide (e.g., 1,2 epoxy propane) peak, it is not possible to determine areas for all the acetaldehyde peaks in all the runs, but the scatter observed in the experimental data is generally smoothed out when areas are taken into account. Occasionally, there will be an anomalous value due to a poor sampling. All data given on the data sheets are based on peak height response.

In runs containing 2,3-dimethylbutane, an unknown peak on the C-600 column was observed which was attributed to 2,3-dimethylbutyl-2-nitrate (DMB-N). Although no authentic sample of this compound was available, this assignment was made based on the facts that (1) it is an expected product in 2,3-dimethylbutane runs, based on observations of alkyl nitrate yields in other larger alkane systems (28), (2) the C-600 retention time corresponded to what one would expect for DMB-N and (3) in the same runs, an unknown peak appeared on the Panalyzer (which also monitors organic nitrates; see below), with a retention time appropriate for DMB-N. The C-600 calibration factor was estimated based on those obtained for other C_2^+ alkyl nitrates, and is estimated to be uncertain by at least $\pm$ 50%.

PAN and Alkyl Nitrate Analysis Using the Panalyzer System. PAN and the alkyl nitrates were monitored by GC using electron capture detection (ECD) and an 18" x 1/8" Teflon column of 5% Carbowax 400 on chromosorb G (80/100 mesh) operated at ambient temperature (29,30). All analyses on this system were done by flushing a ~2 ml loop with a 100 ml sample, then injecting the contents of the loop onto the column; the high sensitivity

Table 2. Comparison of Acetaldehyde Concentrations Determined from Area Response with Those from Peak Height Response on the 10' 10% C-600 System

Run Number	Concentration Uncertainty[a]
95-106	20-30% high[b]
113-121	5-20% low[b]
179-188	0-5% low[b]
207-216	5-20% high
230-236[c]	0-10% high
256-279	5-20% low

[a]Height response/area response. The area response is estimated to be reliable to ±10%.

[b]Peak height data were not corrected for error in density of acetaldehyde used to calculate calibration factors; and the peak height data should be higher by 6%. The numbers on this table do not take this into account.

[c]Run 230 was anomolous, 25% high.

of the ECD to the nitrate group made sample concentration unnecessary.

Due to the limited linear range of the ECD, a calibration curve is required for each compound. Calibrations for PAN response have been carried out using three independent methods for obtaining dilution of PAN to a variety of concentrations [PAN was prepared as described previously (31)]. All methods rely on the determination of the PAN concentration in a pressurized cylinder by infrared absorption of the 8.65 μ band of PAN (30) ($\varepsilon = 13.9 \times 10^{-4}$ ppm^{-1}) in a 10 cm pathlength cell using a Perkin-Elmer Model 137 IR spectrophotometer. PAN calibrations throughout this program showed some degree of scatter, but generally agreed to within $\pm$20%, regardless of the method used. Because of the known instability of PAN and its catalytic decomposition on metal surfaces (32), it would be expected that the most correct values are those of maximum response for a given PAN conencentration. However, the general agreement obtained using the independent methods which provide a variety of surfaces suggests that PAN decomposition is not a substantial factor in determining the reliability of calibration curves. Some of the scatter in the PAN calibrations may also have been due to the uncertainty of the infrared determination of the PAN sample prior to dilution.

There are several other factors to be considered in evaluating the accuracy of the PAN data. A major one is degree of control of operating parameters provided by the GC system itself. A Wilkens Instrument & Research, Inc., Model PAN-680 GC purchased in 1963 was used for this analysis. Although this instrument does not provide the oven temperature control of newer instruments, it does have a standing current control. For all of the work reported here, calibrations and experiments, the standing current has been maintained within $\pm$2% of a fixed value. This is of major importance since there is an approximately 1:1 correlation between response and standing current. The instrument was operated near ambient temperature and the oven temperature ranged from 24-32 C, and retention times for PAN have been 0.95-1.45 minutes. Although an increased response for shorter retention times is expected, such a trend has not been observed. This may be a result of changing calibration methods or there may, in fact, be less thermal decomposition of the PAN at the lower operating temperature (longer retention time) which compensates for the reduced peak height.

A recent report by Holdren and Rasmussen (33) claimed that the response of GC-ECD systems to PAN can be dependent on the moisture content of the PAN sample. Specifically, they found maximum GC response to PAN when the samples were at very high (~100%) relative humidity (RH) and a much lower response when the RH dropped below about 30%. Subsequent studies by Watanabe and Stephens (34), however, showed that such effects were significant only for acid-washed glassware.

The overall accuracy of the data for PAN was estimated to be ±20%; and ±50% for methyl and ethyl nitrate. For the larger organic nitrates, the C-600 analysis was considered to be more accurate, and the ECD data was not used when C-600 data was available.

Aromatic Hydrocarbon and Oxygenate Analysis Using the 3-Part System. For some runs, aromatic hydrocarbons and/or oxygenates were monitored using a 3-part column consisting of three 1/8" stainless steel tubes in series, packed as follows: 5% 1,2,3-tris(2-cyanoethoxy)-propane on HMDS Gas Chrom W (100/120 mesh) (10′), 5% bentone 34 + 5% dinonyl phthalate on HMDS Gas Chrom W (100/120 mesh) (5′), and 10% Carbowax 600 on C-22 firebrick (30/60 mesh) or HMDS Gas Chrom W (100/120 mesh). The columns were held at 65 C, N_2 flow was 36 ml/min. and flame ionization detection was used. Calibration and sampling for this system was exactly as described for the C-600 system.

In general, this system did not separate the oxygenates as well as did the C-600 system, so use of the C-600 system for oxygenate analysis was preferred. However, the 3-part system gave better separation for ethylene oxide (i.e., 1,2 epoxyethane) so it was used to monitor that compound.

An indication of the uncertainties in the acetaldehyde analysis can be obtained from selected runs in which acetaldehyde was monitored using both the three-part system and the C-600 system (only the C-600 data is reported on the data sheets). Some of the difficulties encountered in carrying out the acetaldehyde analysis are discussed in Section 3.

Benzaldehyde Analysis Using the 3′ C-600 System. In the earliest toluene runs (EC-82 through EC-86), benzaldehyde was monitored using a 3′ x 1/8" stainless steel column packed with 10% Carbowax 600 on C-22 firebrick (100/110 mesh) held at 90 C. The N_2 flow was 50.5 ml/min. and

flame ionization detection was used. Sampling was done by flushing a ~2 ml loop whose contents were then injected into the column. Calibration was done as described for oxygenates on the 10′ C-600 or the 3-part columns. This method has proven to be inappropriate because benzaldehyde is difficult to quantitatively evaporate, suggesting that all of the 3′ C-600 benzaldehyde data may be systematically high.

Interference by an unknown contaminant peak (which was not a product of the runs, but nevertheless could not be eliminated) also made this analysis highly uncertain. At best, this analysis is uncertain by ±50%, with the uncertainty increasing significantly as the concentration decreases. This analysis was superceded by the SP-1000 analysis and, later, by the 5′ 5% C-600 analysis, both described below.

Aromatic Product Analysis Using the SP-1000 System. Benzaldehyde, cresols and nitrotoluenes were monitored using a 6′ x 2 mm I. D. glass column packed with 0.1% SP-1000 on Carbopack C. N_2 flow was held at 20 ml/min. and flame ionization detection was used. Samples for analysis on the SP-1000 column are collected by drawing a known volume of sample (generally ~10 liters) through a 60-80 mesh Tenax-filled, 3" x 4 mm I. D. tube at ambient temperatures. The Tenax tube was placed in series with the SP-1000 column and heated to 250 C, while the column was held at 150 C. The carrier gas then drove the compounds of interest off the Tenax tube and onto the column. Following the desorption process, which took 20 minutes, the column was temperature-programmed from 150 C to 250 C at 20 C/min.

Prior to Run EC-330, calibrations were done by placing known volumes of dilute methanol solutions of the compound of interest directly into the Tenax-filled tube, then desorbing the contents of the tube into the column as described above. For Run EC-330 and those following, calibrations were done by injecting known amounts into the evacuable chamber and sampling from the chamber using the same procedure as for an experimental run. The samples were introduced into the chamber using vacuum techniques or by measuring the weight change of a glass-wool-filled tube, in which the compound was introduced, before and after being flushed with N_2 into the chamber. The precision of the earlier "liquid" calibrations was generally ±10-50%. The precision of the "chamber" calibrations (based on both

methods of sample injection into the chamber) was ±9% for benzaldehyde and m-nitrotoluene and ±20% for o-cresol.

Several problems were inherent to the SP-1000 analysis. The procedure employed using this system was more difficult than any of the other GC analyses, and caused it to be generally less precise than the others. Temperature programming resulted in rapid baseline changes around the time of benzaldehyde elution, which resulted in very broad and asymmetrical peak shapes for this compound. Contaminant peaks were a problem which could not be eliminated. In general, all analyses using this system can be considered reliable to within ±50% at best. This is consistent with the benzaldehyde data given on the data sheet for Runs EC-335 through EC-340, which were obtained using both this system and the considerably less uncertain 5′ 5% C-600 system (see below).

Aromatic Product Analysis Using the Tenax GC System. For several runs, cresols, nitrotoluenes and hydroxynitrotoluenes were monitored using a 10′ x 1/8" glass column packed with 60/80 mesh Tenax GC (Altech). The N_2 flow was held at 20 ml/min. The sampling procedure employed was similar to that used for the SP-1000 system (the same instrument was used). The Tenax traps were heated to 250 C and its contents were desorbed onto the 100 C column for 5 min. The column was then temperature-programmed from 100 C to 250 C at 20 C/min. Calibrations were done by microsyringing methanol solutions of the compounds of interest on the Tenax traps, as done for the SP-1000 system. The uncertainty of the data obtained using the Tenax GC system is probably comparable to, or greater than, the uncertainty of the data from the SP-1000 system, since similar problems were encountered in both systems and fewer Tenax GC calibration injections were attempted.

Aromatic Reactant and Product Analysis Using the 5′ C-600 System. Towards the end of this program, toluene and benzaldehyde or m-xylene and m-tolualdehyde were monitored using a 5′ x 1/8" stainless steel column packed with 5% Carbowax 600 on C-22 firebrick (100/115 mesh). The N_2 flow was 50.5 ml/min and flame ionization detection was used. Sampling was done as for the 10′ 10% C-600 or the 3-Part system, except that the traps in which the sample was concentrated were heated with boiling water instead of an ice bath, and the GC injection valves were heated to 95-100 C.

Calibration was done by sampling from the evacuable chamber dosed with known amounts of the compound of interest, as described for the SP-1000 system.

The reliability of the aromatic hydrocarbon analysis on the 5' 5% C-600 system is probably comparable to that of the 10' 10% C-600 system except that there is a larger body of calibration data for the latter. Compared to the 3' C-600 or the SP-1000 systems, the reliabilities of the benzaldehyde and tolualdehyde analyses on the 5' 5% C-600 system are excellent. Since there are no significant interferences or other difficulties in the analysis, the overall uncertainty for benzaldehyde or tolualdehyde data obtained from this system is primarily determined by the calibration uncertainties (±5%).

4. CHAMBER AND LIGHT-SOURCE CHARACTERIZATION

The bulk of the chamber and light-source characterization experiments performed in this program have been described in our previous report (13). However, during the period covered by this report, additional O_3 decay experiments, H_2O_2 decay experiments and more complete characterizations of the light source were done. These are described below.

A. Ozone Decay Rates

A detailed discussion of ozone light and dark decay rates was given in our previous report (13) and is only briefly summarized here. Both the light and dark decay rates were found to be highly sensitive to chamber history or pretreatment. After normal experimental conditions, ozone decay rates of 0.0016 min^{-1} and 0.0027 min^{-1} for dark and irradiated conditions, respectively, were typical. These experiments were carried out by adding ozone (prepared using a Welsback ozone generator) to the chamber which had been filled with purified air at 85 F and 50% RH. In more recent experiments (July 6-7, 1976), dark and light decay rates of 0.0007 min^{-1} and 0.0020 min^{-1} were measured. In order to determine whether the presence of the reaction mixture in HC/NO_x systems affects the O_3 dark decay rate, the O_3 dark decay was monitored following a run (EC-165) in which the O_3 maximum was reached, and which was allowed to stand overnight. The observed decay rate was 0.0010 min^{-1}, which is within the variability observed for

the other dark decay experiments.

B. H_2O_2 Decay Rates

Experiments were also done to determine H_2O_2 light and dark decay rates. H_2O_2 was injected into the chamber by bubbling O_2 through a 98% H_2O_2 solution held at a constant and monitored temperature (21-23 C) in a water bath. The amount of H_2O_2 injected was calculated from vapor pressure of H_2O_2 at the temperature of the water bath and the volume of O_2 passed through the H_2O_2 solution (flow rate = 255 ml/min). The relative decay rates were then monitored by I. R. Two dark decay experiments were done. In the first (April 18, 1975; intial H_2O_2 = 7.1 ppm; 4 hour run), the decay rate was 0.0014 ± 0.0001 min^{-1}, in the second (May 13, 1975; initial H_2O_2 = 2.8 ppm, 2.6 hour run), the rate was 0.0016 ± 0.0001 min^{-1}. Although agreement between these runs was good, they were both done within a one-month period, and it is unknown to what extent the H_2O_2 dark decay rate varies with time or with the condition of the chamber.

Three light decay experiments were done, all with solar simulator power equal to 18 KW and an assigned k_1 (NO_2 photolysis rate) of 0.15 min^{-1}. For the first (May 5, 1975; initial H_2O_2 = 4.7 ppm; 3.27 hour run) the rate was 0.0057 ± 0.0001 min^{-1}; in the second (May 13, 1975; initial H_2O_2 = 2.1 ppm, 1.88 hour run), the rate was 0.0035 ± 0.0003 min^{-1}; and in the third (May 13, 1975; initial H_2O_2 = 1.3 ppm; 1.58 hour run) the rate was 0.0039 ± 0.003 min^{-1}. The third light decay run was done with an extra 3/16" pyrex plate filtering the solar simulator output (in addition to the usual 1/4" plate; see Section II-A-2), but this appears to have a minor, if any, effect on the H_2O_2 light decay rate.

C. Light Intensity

A number of NO_2 actinometry experiments have been conducted throughout this program; their results are summarized in Table 3. In general, replicate runs gave a k_1 in agreement to within ± 0.02 min^{-1}. Although O_2 can be effectively removed from the chamber by evacuation (to concentrations less than 10 ppm), as many as 50 ppm of O_2 could have been present in the nitrogen employed in the k_1 experiments. Since our calculations of k_1 were carried out assuming O_2 was absent, O_2 present in concentrations greater than ~10 ppm would lead to lower values for k_1 than would have been observed

Table 3. Actinometry Experiments in the Evacuable Chamber

Date	EC Run No.	Concentrations (ppm)[a] $(NO)_o$	$(NO_2)_o$	$(NO_2)_f$	k_1[b] (min^{-1})	Radiometer (mw/cm^2)	SS Power (KW)	Notes[c]
1975								
May 14	75	0.022	3.01	2.08	0.12	--	17.7	
					0.15	0.14	19.7	Calc for power[d] used in EC-77
Jul 16	88	0.08	2.51	1.50	0.17	0.136	21.3	
22	89	0.03	1.78	1.03	0.18	0.16	21.3	Recoated secondary & flat
28	90	0.06	1.93	1.07	0.39[e]	(0.38)[f]	12.6	Install new lamp (Hanovia), spare collector
Sep 25	93	0.06	2.93	1.86	0.30[e]	0.30[g]	12.0	Radiometer switch position 3
						0.34		Switch position 2
Oct 17	109	0.03	1.87	1.10	0.35[e]	0.332	12.7	
19	111	0.15	1.17	0.75	0.35[e]	0.33	13.3	
Nov 21	112	0.03	2.00	1.14	0.37[e]	0.32	13.0	
1976								
Feb 25	119	0.12	2.12	1.42	0.26[e]	0.299	11.6	New lamp (Durotest)
25	120	0.03	1.64	0.68	0.30	0.401	13.1	Lamp adjusted
Mar 8	126	0.08	2.07	1.00	0.25	0.392	12.9	
8	127	0.05	1.73	0.79	0.27	0.408	13.45	
9	128	0.03	1.76	0.79	0.27	0.435	15.5	Lamp adjusted to position of EC-119
9	129	0.03	1.59	0.60	0.34	0.506	15.5	Lamp adjusted to position of EC-120
15	132	0.03	1.65	0.67	0.31	0.505	15.4	
19	136	0.03	1.55	0.57	0.35	0.515	15.85	

(continued)

Table 3 (continued) - 2

Date	EC Run No.	Concentrations (ppm)[a] $(NO)_o$	$(NO_2)_o$	$(NO_2)_f$	k_1[b] (min^{-1})	Radiometer (mw/cm^2)	SS Power (KW)	Notes[c]
Mar 30	140	0.04	1.56	0.53	0.38[h]	0.488	15.6	
Apr 16	148	0.02	1.29	0.475	0.35	0.511	16.6	
27	154	0.05	1.31	0.42	0.40[h]	0.485	17.4	
May 6	159	0.03	1.57	0.58	0.35	0.503	18.1	
26	167	0.065	1.35	0.490	0.355	0.518	19.8	
Jun 8	170	0.01	2.05	0.646	0.41	0.524	21.2	
					0.36	0.48	19.9	Calc for power[d] used in EC-169
22	173	0.044	1.69	0.927	0.20	0.274	11.5	New lamp (Durotest)
Jul 13	175	0.049	2.13	0.83	0.33	0.352	12.7	New Pyrex filter
					0.38	0.36	13.7	Calc for power[d] used in EC-176
30	184	0.122	1.36	0.454	0.391	0.359	16.0	
Aug 4	187	0.049	2.150	0.714	0.388	0.359	16.6	
26	189	0.039	1.45	0.489	0.382	0.344	13.9	Recoated flat & secondary
1977								
Feb 11	215	0.029	1.32	0.39	0.435	0.356	17.1	
Jun 23	223	0.083	1.65	0.507	0.422	0.327	18.2	
24	224	0.58	1.71	0.781	0.266[1]	0.240	15.0	
24	225	0.029	1.82	0.644	0.362	0.293	17.2	
Aug 5	229	0.083	1.70	0.654	0.332	0.225	17.95	
Oct 26	235	0.0439	1.77	0.761	0.289	0.220	17.8	Trichroic filter removed
Nov 8	244	0.0537	1.67	0.668	0.316	0.233	19.6	

(continued)

Table 3 (continued) - 3

Date	EC Run No.	Concentrations (ppm)[a] $(NO)_o$	$(NO_2)_o$	$(NO_2)_f$	k_1[b] (min^{-1})	Radiometer (mw/cm^2)	SS Power (KW)	Notes[c]
Dec 28	261	0.0732	1.58	0.483	0.424	0.313	13.45	
1978								
Jan 18	262	0.144	1.62	0.584	0.360	0.262	12.0	
Mar 15	267	0.029	1.72	0.700	0.309[i,j]	0.252	11.8	
28	274	0.0488	1.85	0.639	0.373	0.262	12.1	
Apr 24	283	0.0976	2.16	0.708	0.395	0.264	12.82	
Jul 10	295	0.0537	1.75	0.532	0.425	0.256	14.3	
24	303	0.097	2.31	0.695	0.430	0.259	14.9	
Oct 9	313	0.0439	1.78	0.483	0.472	0.256	16.12	
20	322	0.073	1.85	0.407	0.568	0.263	18.98	
20[k]	323	0.034	1.83	0.717	0.323	0.145	12.2	
31	324	0.0488	1.39	0.454	0.396	0.180	14.9	New lamp (Durotest)
31[k]	325	0.0292	1.46	0.576	0.321	0.145	12.76	
31[k]	326	0.062	1.45	0.353	0.522	0.270	18.16	
Nov 9	332	0.039	1.64	0.532	0.398	0.176	14.9	
9[k]	333	0.0292	1.52	0.522	0.375	0.183	15.1	
27	341	0.0488	1.50	0.498	0.389	0.167	15.2	
27[k]	342	0.0497	1.49	0.497	0.387	0.163	15.1	
Dec 11	347	0.0537	1.49	0.495	0.389	0.162	15.1	

[a] Monitored with TECO Model-14B.

[b] Two min irradiation period unless noted otherwise. All k_1 values calculated using the unmodified formula of Holmes et al. (17).

(continued)

Table 3 (continued) - 4

[c]Given conditions hold for subsequent runs until explicitly noted otherwise.

[d]Assume $k_1 \sim (\text{power})^2$.

[e]1 min. irradiation.

[f]Reading at 12.2 KW after completion of experiment; radiometer did not reach steady value during k_1 determination.

[g]Filter (330 ± 40 nm) installed with radiometer for this and all subsequent readings.

[h]Anomalously high value. Believed to be due to insufficient warm-up time, and not used in assigning k_1 values for experimental runs.

[i]Anomalously low value. May be due to O_2 in chamber. Not used in assigning k_1 values for experimental runs.

[j]N_2 in chamber overnight.

[k]Immediately preceded by another actinometry experiment. Chamber was not completely pumped down.

in the complete absence of O_2 (17). For example, 50 ppm of O_2 would result in a value of k_1 ~10% low with respect to the true NO_2 photolysis rate (17). An oxygen-contaminated N_2 cylinder or a leak while filling the chamber would probably accounts for the occasional, unexpectedly low k_1's which were observed.

Wu and Niki (25) have pointed out that use of the equation of Holmes et al. (17) is not strictly applicable unless $[NO]/[NO_2] > 0.5$, due to the fact that N_2O_5 has not reached a steady state concentration. An experiment (Run EC-112) was accomplished by running a series of consecutive 1 minute photolyses starting with 2.0 ppm NO_2. The results are given in Table 4, along with calculated values of k_1 using the unmodified Holmes equation, and using the Holmes equation modified to be consistent with the recommended rate constants given by Hampson and Garvin (2). These data show that reasonably consistent values of k_1 were obtained for the 0-1 min irradiaton when $[NO]/[NO_2] \leq 0.5$. It can also be seen that the values of k_1 calculated from the experimental data depended on the rate constants used in the calculations, with the discrepancy generally increasing as [NO] increases. The k_1 values given on Table 3 were all calculated using the unmodified equation of Holmes et al. (17), and may be 5-10% low if the rate constants of Hampson and Garvin (2) are more appropriate.

The k_1 values assigned for the individual experimental runs were based on the observed correlations between the results of the actinometry experiments listed in Table 3 and the average radiometer reading or average solar simulator power. For the runs prior to EC-274, the radiometer readings were found to correlate reasonably well with measured k_1 values, at least for a given solar simulator lamp and condition of the optical system; this is what was primarily used to assign the k_1 values during that period. Because of this correlation, the practice had been to adjust the solar simulator power to maintain constant radiometer readings in order to assure constant k_1 values for a given set of runs. However, after Run EC-274, the sensitivity of the radiometer apparently began to deteriorate, since it was observed that the k_1 steadily increased with time in runs during which the radiometer readings were held constant (see Runs EC-275 through EC-323 on Table 3). During that period, a good correlation was observed between measured k_1 values and average solar simulator

Table 4. Experimental Data and Calculated Results for the NO_2 Photolysis Rate Constant (k_1) Determined in Five Consecutive One-Minute Photolyses

Time (min)	NO (ppm)	NO_2 (ppm)	Calculated k_1 (min^{-1}) Unmodified[a,c]	Modified[b,c]
0	0.03	2.00		
			0.374	0.385
1	0.85	1.14		
			0.359	0.395
2	1.27	0.70		
			0.370	0.438
3	1.50	0.45		
			0.298	0.375
4	1.62	0.33		
			0.305	0.404
5	1.69	0.25		

[a]Calculated using the equation given by Holmes et al. (A), based on the values of k_a, k_b and k_c given below.[c]

[b]Calculated using the equation of Holmes et al. (17), modified to be consistent with the k_a, k_b and k_c values recommended by Hampson and Garvin (2) for 85 F.[c]

[c]Rate constants used are as shown:

Reaction	k(cm molecule sec units) Holmes et al. (17)	Garvin & Hampson (2)
(a) $O + NO_2 \rightarrow NO + O_2$	9.35×10^{-12}	9.1×10^{-12}
(b) $O + NO_2 + N_2 \rightarrow NO_3 + N_2$	1.24×10^{-31}	1.0×10^{-31}
(c) $O + NO + N_2 \rightarrow NO_2 + N_2$	6.44×10^{-32}	1.07×10^{-31}

power, so the latter quantities were used to assign the k_1 values for the experimental runs. Following Run EC-324, the k_1 values for the experimental runs were held constant by holding the solar simulator power constant.

D. Spectral Distribution

The spectral distribution of the solar simulator output after passage through the chamber was obtained with one of two systems: (a) a McPherson 0.3 m monochromator (with a grating blazed at 200 nm) and a Hamamatsu R106 photomultiplier (through Run EC-156) or (b) a SPEX spectrometer (Model 1667) with a 1P28 photomultiplier (beginning with Run EC-156). The differences in spectra upon changing from the McPherson to the SPEX system were within that observed between spectra from one day to the next using the same system. The response of these systems as a function of wavelength was determined using an NBS standard lamp and the solar simulator spectral data have been corrected for this response, thus providing data which is proportional to photo flux.

The spectra were originally recorded on a strip chart and the values read from the chart. Beginning with Run EC-177, the intensity was monitored with a digital voltmeter with manual setting of each desired wavelength. This removed some of the imprecision associated with reading values from the chart, particularly at short wavelengths, where the intensity rapidly changed.

Spectral distributions measured for the individual experiments are given on the data sheets. Variation of hourly spectra taken during a single run was found to be less than 5%. The intensities were normalized to a value of 1.0 at 350 nm. This wavelength was chosen because the maximum intensity seen by the radiometer (equipped with a 330 ± 40 nm filter) was calculated to be 350 nm. The spectral distributions within a given series of runs done around the same time and employing similar photolysis conditions were fairly constant. However, as the solar simulator lamps were changed or the optics upgraded or otherwise modified, the spectral distributions were observed to change significantly. Therefore, no single spectral distribution can be considered to be representative of all the experiments reported here.

5. PHOTOOXIDATION OF HYDROCARBON-NO_x SYSTEMS

A. Experimental Runs Performed

The reactivity and product formation resulting from irradiations of single, dual and multi-hydrocarbon mixtures in NO_x-air systems have been studied in this program. In most cases, experiments were done at a variety of initial hydrocarbon and NO_x levels, using factorial design blocks as a basis for systematically selecting the most efficient and relevant set of concentrations of reactants, given that only a limited number of runs could be done for each system (13). In addition to studying the effects of initial reactant concentrations, the effect of varying temperature was studied for the propene-NO_x and n-butane-NO_x systems. The effects of initially-present aldehydes were studied for the propene-NO_x, n-butane-NO_x and toluene-NO_x systems, and the effect of initially-present PAN was studied for the propene-NO_x system. In a number of cases, duplicate runs were done to determine the reproducibility of four experimental systems. In particular, seven standard propene runs (initial propene $\cong$ initial $NO_x \cong 0.5$ ppm) were done at scattered intervals throughout the program. In all, 114 photochemical runs were done in this program throughout the ~four year period covered by this report.

Single Hydrocarbon Runs. The reactivities of 10 individual hydrocarbons or aldehydes in NO_x-air irradiations were studied, in most cases at a variety of initial reactant concentrations. The individual hydrocarbons studied (ordered by the number of runs performed) are (1) ethene (6 runs), (2) propene (19 runs), (3) 1-butene (3 runs), (4) trans-2-butene (3 runs), (5) n-butane (10 runs), (6) 2,3-dimethyl butane (3 runs), (7) toluene (24 runs), (8) m-xylene (4 runs), (9) formaldehyde (4 runs) and (10) acetaldehyde (3 runs). The initial concentrations and special experimental conditions for the single hydrocarbon-NO_x runs are given in Table 5. The runs are given in the table in order of increasing hydrocarbon and NO_x levels; the run numbers give an indication of the time period in which the run was done.

Dual Hydrocarbon Runs. The reactivities of eleven dual hydrocarbon mixtures were also studied, also at a variety of initial reactant concentrations. The systems studied were: (1) propene + n-butane (7 runs),

Table 5. Initial Concentrations, Light Intensities and Selected Reactivity Parameters for Single Component Hydrocarbon-NO_x Runs

Run No.		Initial Concentration (ppm) HC	NO	NO_2	NO_x	k_1 (min^{-1})	Special Conditions	6 Hr O_3 (ppm)	O_3 Max (min)	O_3 Max (ppm)	NO_2 Max (min)	NO_2 Max (ppm)	Notes
142	Ethene	0.949	0.322	0.158	0.480	0.33		.782	> 360	-	105	.303	
143		2.027	0.390	0.110	0.500	0.33		.848	210	1.087	60	.375	
156		1.995	0.376	0.124	0.501	0.32		.796	195	1.055	45	.365	Duplicate
285		1.949	0.791	0.215	1.006	0.39		.840	> 360	-	165	.711	
287		3.995	0.404	0.124	0.528	0.39		.552	135	.965	45	.449	
286		3.758	0.708	0.237	0.947	0.39		.682	180	1.080	60	.756	
217	Propene	0.099	0.241	0.238	0.478	0.43	Acetaldehyde = 0.146 ppm	.059	> 675	-	180	.272	
256		0.109	0.520	0.044	0.564	0.30	Formaldehyde = 0.042 ppm[a]	.002	> 360	-	> 360	-	
257		0.112	0.530	0.032	0.559	0.30	Formaldehyde = 0.371 ppm[a]	.066	> 360	-	195	.303	
277		0.564	0.098	0.010	0.108	0.35		.296	135	.313	30	.085	
95		0.504	0.365	0.092	0.456	0.35		.403	270	.432	45	.321	
96		0.500	0.349	0.090	0.438	0.35		.412	300	.422	60	.302	
121		0.483	0.410	0.101	0.510	0.30		.501	315	.506	45	.341	Standard
177		0.493	0.364	0.099	0.463	0.33		.523	435	.540	90	.314	Propene
216		0.503	0.412	0.104	0.518	0.43		.523	465	.564	105	.367	Runs
230		0.546	0.392	0.128	0.520	0.30		.298	> 420	-	120	.364	
276		0.540	0.410	0.106	0.517	0.35		.374	> 360	-	135	.366	
317		0.493	0.256	0.281	0.530	0.53		.606	> 390	-	45	.392	
318		0.509	0.172	0.331	0.500	0.53	PAN = 0.072 ppm	.684	285-300	.689	45	.419	
319		0.502	0.100	0.430	0.530	0.55	PAN = 0.149 ppm	.747	255	.755	30	.460	
320		0.536	0.222	0.338	0.560	0.55	PAN = 0.036 ppm	.633	330	.642	45	.405	
278		1.016	0.366	0.128	0.498	0.35		.559	195	.625	60	.385	
279		1.144	0.730	0.244	0.977	0.35		.677	> 360	-	105	.705	
314		1.062	0.684	0.246	0.918	0.48		.728	> 360	-	90	.666	Duplicate
315		0.967	0.664	0.276	0.942	0.49	T = 61.4 F	.344	> 360	-	135	.614	
316		1.070	0.735	0.246	0.982	0.51	T = 102 F	.953	> 360	-	60	.724	
122	1-Butene	0.217	0.398	0.103	0.500	0.29		.181	> 420	-	180	.281	
123		0.404	0.401	0.106	0.505	0.28		.469	> 450	-	75	.323	
124		0.424	0.608	0.385	0.996	0.27		.083	> 630	-	210	.535	

Table 5 (continued) - 2

No.		Initial Concentration (ppm) HC	NO	NO_2	NO_x	k_1 (min^{-1})	Special Conditions	6 Hr O_3 (ppm)	O_3 Max (min)	O_3 Max (ppm)	NO_2 Max (min)	NO_2 Max (ppm)	Notes
146	Trans-2-	0.231	0.385	0.124	0.510	0.33							
157		0.216	0.397	0.129	0.525	0.34		.239	> 360	-	60	.297	Duplicate
147	butene	0.417	0.782	0.200	0.982	0.34		.205	> 360	-	60	.305	
								.154	> 360	-	90	.556	
178	n-Butane	1.961	0.087	0.011	0.099	0.33							
162		2.050	0.383	0.122	0.506	0.35		.366	> 495	-	75	.066	
163		1.978	0.377	0.113	0.490	0.34	Acetaldehyde = 0.526 ppm	.112	> 360	-	270	.276	
168		1.961	0.326	0.166	0.493		Formaldehyde = 1.101 ppm	.430	> 360	-	105	.299	
305		4.30	0.078	0.021	0.099	0.43		.327	> 675	-	105	.302	
304		4.28	0.349	0.117	0.466	0.43		.398	> 360	-	45	.076	
308		4.05	0.305	0.178	0.483	0.44	T = 59.1 F	.269	> 435	-	180	.324	
309		4.31	0.203	0.272	0.475	0.45	T = 101.1 F	.044	> 360	-	345	.275	
307		6.44	0.083	0.019	0.102	0.43		.545	> 360	-	90	.363	
306		6.44	0.147	0.040	0.187	0.43		.420	> 390	-	45-60	.078	
								.520	> 405	-	90-105	.146	
171	2,3 Dimethyl-	0.586	0.086	0.013	0.099	0.33							
169		0.740	0.126	0.064	0.191	0.33		.330	> 630	-	90	.055	
165	butane	1.885	0.088	0.011	0.100	0.33		.237	> 720	-	150	.124	
								.457	510-570	.489	90	.069	
78	Toluene	0.228	0.069	0.032	0.101	0.14							
77		0.276	0.518	0.059	0.574	0.14		.086	195	.092	45	.066	
273		0.587	0.096	0.014	0.110	0.37		.012	> 360	-	330	.236	
269		0.566	0.398	0.074	0.472	0.35		.188	75-90	.215	30	.064	
327		0.572	0.351	0.096	0.445	0.40		.298	> 360	-	150	.260	
340		0.537	0.333	0.096	0.430	0.39		.376	> 360	-	135	.259	Duplicate
270		0.576	0.414	0.051	0.465	0.35	Formaldehyde = 0.178	.346	> 360	-	105	.250	
339		0.576	0.341	0.102	0.445	0.39	Benzaldehyde = 0.187	.362	330	.369	90	.274	
272		0.580	0.398	0.080	0.478	0.35	Acetaldehyde = 0.361	.225	> 360	-	195	.235	
79		0.976	0.080	0.020	0.100	0.14		.410	> 360	-	90-105	.296	
271		1.146	0.186	0.028	0.215	0.37		.080	105-120	.096	30	.063	
80		1.02	0.401	0.095	0.498	0.14		.217	90	.296	30	.142	
84		0.968	0.388	0.081	0.469	0.14		.234	255	.272	105	.312	Duplicate
								.233	> 360	-	135-150	.273	

Table 5 (continued) - 3

Run No.		Initial Concentration (ppm) HC	NO	NO_2	NO_x	k_1 (min^{-1})	Special Conditions	6 Hr O_3 (ppm)	O_3 Max (min)	O_3 Max (ppm)	NO_2 Max (min)	NO_2 Max (ppm)	Notes
	Toluene (continued)												
264		1.156	0.420	0.056	0.470	0.35		-	210	.419	90	.285	Duplicate
265		1.070	0.435	0.048	0.482	0.35		-	210	.393	90	.295	
266		1.196	0.432	0.059	0.494	0.35		.332	210-225	.403	90	.295	
86		1.090	0.407	0.080	0.485	0.14	Formaldehyde = 0.161	.285	330	.299	120	.336	
337		0.971	0.322	0.124	0.448	0.39	Benzaldehyde = 0.172	.269	255	.325	105	.264	
335		1.005	0.352	0.092	0.443	0.39	Acetaldehyde = 0.326	.344	225	.396	75	.274	
336		0.993	0.342	0.097	0.439	0.39	Formaldehyde = 0.301	.264	165	.393	60	.271	
81		1.96	0.408	0.094	0.502	0.14		.231	180	.313	270	.342	
85		1.920	0.431	0.093	0.523	0.14		.258	240	.293	120	.348	
82		1.88	0.679	0.377	1.016	0.14		.365	> 360	-	180	.607	
83		5.63	1.334	0.674	2.003	0.14		.418	> 360	-	270	1.370	
343	M-xylene	0.491	0.214	0.066	0.279	0.38		.093	75	.283	30	.189	Duplicate
345		0.480	0.220	0.059	0.278	0.39		.318	75	.396	25	.192	
346		0.478	0.204	0.059	0.261	0.39		(.342)[b]	55-60	.384	35	.118	
344		0.486	0.520	0.154	0.671	0.39		.503	180	.586	45	.454	
164	Acetaldehyde	0.340	0.388	0.118	0.506	0.33		.085	> 360	-	210	.259	
253		0.546	0.011	0.009	0.020	0.30	a	.134	> 360	-	0	.009	
254		0.472	0.085	0.037	0.112	0.30	a	.264	> 360	-	60	.068	
251	Formaldehyde	0.193	0.080	0.033	0.113	0.30	a	.271	> 360	-	30	.077	
250		0.328	0.011	0.012	0.023	0.30	a, no NO_x injected	.213	> 360	-	> 360	-	Duplicate
255		0.330	0.006	0.010	0.016	0.30	a, no NO_x injected	.203	> 360	-	> 360	-	
252		0.359	0.392	0.103	0.493	0.30	a	.024	> 360	-	165	.232	

[a] Small amounts of n-butane and neopentane were added to allow calculation of hydroxyl radical concentrations from their relative rates of appearance.

(2) propene + ethene (3 runs), (3) propene + trans-2-butene (1 run), (4) n-butane + 2,3-dimethylbutane (2 runs), (5) toluene + propene (3 runs) and (6) toluene + n-butane (3 runs). The initial concentrations used in the dual hydrocarbon-NO_x runs are given in Table 6.

Multi-Hydrocarbon Runs. Runs were done employing two multi-hydrocarbon systems: (1) four olefin mixtures containing ethene, propene, 1-butene and trans-2-butene (5 runs) and (2) seven hydrocarbon mixtures containing ethene, propene, trans-2-butene, n-butane, 2,3-dimethylbutane, toluene and m-xylene as representative alkanes, olefins and aromatics (11 runs). Both systems were irradiated at several hydrocarbon and NO_x levels and with varied relative composition of the hydrocarbon mixtures. The initial concentrations used in these multi-hydrocarbon runs are given in Tables 7 and 8.

B. Results

Detailed data sheets for each of the photochemical runs performed in this program during the period covered by this report are given in the Appendix. The data sheets are presented in chronological order (i.e., in order of increasing run numbers). To allow for easier comparison of overall reactivity results within each experimental system, Tables 5 through 8 give selected reactivity parameters observed for each experiment.

In addition to giving the results of all relevant experimental measurements made during each run, the data sheets give the following information: (1) the initial concentrations of reactants and observed background species, (2) the averages of measurements of physical parameters such as temperature, relative humidity, etc., (3) relevant calibration data, (4) the assigned k_1 values, (5) the calculated total rate of gas withdrawal from the chamber due to sample withdrawal (see Section II-B-5), allowing for calculation of the dilution rate for each run (chamber volume = 5774 ℓ), (6) the calculated total PAN + organic nitrate concentrations ("TOT NO_3") used to obtain the corrected NO_2 and NO_x data from the raw values (21) (the latter being listed on the last page of each data sheet as "NO2" and "NOX"), (7) the calculated total nitrogen ("TOT N") and carbon levels ("HCTOT") and (8) the water concentrations calculated from the RH and the temperature data. In addition, the data sheets for each run

Table 6. Initial Concentrations, Light Intensities and Selected Reactivity Parameters for Dual Component Hydrocarbon-NO_x Runs

Run No.	Initial Concentrations (ppm)							k_1 (min^{-1})	6 Hr O_3 (ppm)	O_3 Max (min)	O_3 Max (ppm)	NO_2-corr. max (min)	NO_2-corr. max ppm	Notes
		HC_1		HC_2	NO	NO_2	NO_x							
113	Propene	0.410	n-Butane	2.04	.091	0.020	0.111	0.35	.297	105-150	.348	30	.080	
99		0.400		2.00	0.407	0.090	0.497	0.35	.539	300	.557	60	.351	Duplicate
106		0.402		2.00	0.401	0.102	0.500	0.35	.590	390-405	.592	105	.344	Duplicate
97		0.500		2.04	0.397	0.088	0.500	0.35	.524	240	.578	60	.355	
115		0.310		2.94	0.402	0.104	0.506	0.35	.582	420	.590	105	.362	
116		0.824		4.00	0.391	0.104	0.493	0.35	.619	165-180	.741	60	.382	
114		0.766		3.66	0.794	0.204	0.996	0.35	.733	330	.745	90	.701	
145	Propene	0.428	Ethene	1.049	0.745	0.246	0.994	0.34	.777	> 360	-	120	.635	
160		0.400		1.400	0.752	0.241	0.994	0.35	.874	> 360	-	105	.631	
144		0.221		2.027	0.398	0.111	0.509	0.33	.767	165-180	1.060	45	.377	
149	Propene	0.384	t-2-Butene	0.209	0.813	0.176	0.989	0.33	.276	> 360	-	75	.585	
172	n-Butane	0.339	2,3 DMB	0.237	0.079	0.017	0.097	0.34	.259	> 690	-	135	.054	
166		1.816		0.319	0.088	0.012	0.100	0.33	.452	> 480	-	45-75	.064	
330	Toluene	0.567	Propene	0.0942	0.202	0.090	0.290	0.40	.278	180	.344	60	.193	
329		0.555		0.0985	0.352	0.102	0.455	0.40	.384	300-315	.403	90-105	.279	
334		0.993		0.0954	0.348	0.100	0.448	0.39	.315	180	.408	60	.289	
328	Toluene	0.569	n-Butane	2.038	0.349	0.100	0.449	0.40	.523	360	-	105	.298	
338		0.969		2.026	0.346	0.100	0.447	0.39	.410	240	.484	75	.301	
331		1.991		2.043	0.351	0.112	0.464	0.40	.352	120	.523	45	.334	

Table 7. Initial Concentrations, Light Intensities and Selected Reactivity Paramters for Mixed Olefin-NO_x Runs

Run No.	Initial Concentrations (ppm) Propene	Ethene	1-Butene	t-2-Butene	NO	NO_2	NO_x	k_1 (min^{-1})	6 Hr. O_3 (ppm)	O_3 Max (min)	O_3 Max (ppm)	NO_2 Max (min)	NO_2 Max (ppm)
161	0.102	0.908	0.189	0.088	0.386	0.123	0.510	0.34	-	210-225	.857	45	.369
152	0.116	1.015	0.222	0.102	0.398	0.104	0.504	0.35	.689	210-225	.787	45	.362
150	0.224	1.014	0.097	0.093	0.774	0.222	0.998	0.33	.799	> 360	-	105	.630
151	0.441	0.975	0.209	0.190	1.466	0.590	2.056	0.35	.147	> 360	-	150	1.124
153	0.109	1.923	0.415	0.193	0.774	0.197	0.969	0.34	.801	180	1.050	45	.706

Table 8. Initial Concentrations, Light Intensity and Selected Reactivity Parameters for Seven Hydrocarbon Mixture-NO_x Runs

Run No.	Ethene	Propene	t-2-Butene	n-Butane	2,3DMB	Toluene	m-xylene	NO	NO_2	NO_x	k_1 (min^{-1})	6 Hr O_3 (ppm)	O_3 Max (min)	O_3 Max (ppm)	NO_2 Max (min)	NO_2 Max (ppm)
241	0.484	0.045	0.024	0.464	0.211	0.040	0.044	0.379	0.110	0.489	0.30	.408	> 360	-	135	.342
246	0.253	0.049	0.026	1.058	0.538	0.023	0.023	0.386	0.122	0.506	0.30	.374	> 570	-	135	.366
247	1.025	0.054	0.053	0.273	0.080	0.145	0.145	0.380	0.125	0.505		-	210-225	.655	60	.369
233	0.260	0.051	0.025	1.085	0.648	0.034	0.033	0.096	0.007	0.103	0.30	.322	240-285	.327	30-45	.071
237	0.875	0.100	0.050	1.025	0.463	0.086	0.091	0.377	0.106	0.483	0.30	.584	240	.655	60	.368
238	0.982	0.093	0.047	0.966	0.420	0.083	0.084	0.718	0.234	0.952	0.30	.606	435	.694	120	.663
232	0.258	0.051	0.026	1.102	0.612	0.032	0.029	0.469	0.024	0.492	0.30	.305	> 360	-	165	.333
231	1.051	0.108	0.055	1.130	0.715	0.121	0.108	0.440	0.052	0.492	0.30	.540	240	.623	75	.357
243	1.939	0.109	0.110	0.568	0.084	0.155	0.154	0.386	0.115	0.502	0.30	-	135	.716	30	.394
242	2.014	0.109	0.108	0.558	0.203	0.306	0.306	0.377	0.125	0.503	0.30	.418	105	.682	30	.400
245	2.055	0.104	0.102	0.534	0.185	0.321	0.317	0.743	0.259	0.992	0.30	.635	180	.892	60	.752

include comments which describe any special problems, conditions or procedures associated with that experiment, and in some cases, give miscellaneous observations made during the run. Before the results of any run are used for model validation, its associated comments should be examined.

C. Limitations of the Data Set

Although these experiments were performed using the highest reasonable level of characterization and quality control practical at the time, it is important to stress that the data must be examined critically before being used for model validation. A discussion of the problems and uncertainties associated with most of the different types of measurements made during these runs have been given in Section 1. In some cases (formaldehyde and benzaldehyde, in particular), the quality of the data improved significantly during the latter part of the program. In addition, experimental conditions or procedures were changed from time to time throughout the program, which may affect the quality and reproducibility of the data. Significant changes in procedures were discussed in Section 1.

An indication of the reproducibility of experiments done at separate times throughout the program can be obtained by examining the results of the standard propene runs listed in Table 5. It can be seen that the reproducibility is poor for runs separated by large time intervals. The most obvious explanation for this is the differences in light intensity (see the k_1 values given in Table 5), though chamber conditioning or the modification of the pumping system made around the time of Run EC-121 may also have contributed. Poor reproducibility was also observed in the earliest set of toluene-NO_x experiments (compare Runs EC-80 and 81 and EC-84 and 85, respectively). This can be attributed to a temporary lack of temperature control throughout that period (see comments on data sheets). On the other hand, in the most recent toluene-NO_x runs, much better reproducibility was obtained.

Perhaps the most serious limitation of these data concerns the problem of chamber wall effects. "Memory" or "dirty wall" effects appear to be inherent in irradiation vessels employed in HC-NO_x photooxidation studies (36-38). Indeed, in our chamber runs there are a number of cases where it is difficult to attribute non-reproducibility to changes in light intensity alone (see Tables 5-8 and our previous report [13]). In addition,

in all cases when our data has been modeled (6,7,9-12), it has been necessary to provide for some type of radical input from unknown sources in order to fit the initial rates of hydrocarbon decay and NO conversion. This is frequently attributed to nitrous acid (HONO) being initially present (formed during the injection of NO_x), which rapidly photolyzes to form hydroxyl radicals; but results of recent experiments done in our laboratories (39), in which NO_x was injected under conditions designed to minimize HONO formation, indicate that this is not the case. Experiments we have done employing clean Teflon bags indicate that the reactivity increases significantly after the bag accumulates a history of hydrocarbon-NO_x irradiations (40). The nature and causes of this effect in our evacuable chamber have not yet been adequately characterized.

6. KINETICS AND MECHANISM OF THE GAS PHASE REACTION OF OH RADICALS WITH METHOXYBENZENE AND o-CRESOL OVER THE TEMPERATURE RANGE 299-435 K

A. Introduction

Phenolic compounds are formed from the gas phase reaction of $O(^3P)$ atoms of OH radicals with aromatic hydrocarbons (41-46), and are products from the reaction of OH radicals with aromatic hydrocarbons under polluted atmospheric conditions (47). The gas phase reactions of the hydroxyl radical with these phenolic compounds are hence of great importance for kinetic chemical modeling of photochemical air pollution.

B. Experimental

OH radicals were produced by the pulsed vacuum ultraviolet photolysis of H_2O at wavelengths longer than the LiF cutoff ($\geq$1050 Å). OH radical concentrations were monitored as a function of time after the flash by resonance fluorescence using a cooled EMI 9659QA photomultiplier fitted with an interference filter transmitting the 3064 Å band of OH ($A^2+,\Sigma v' = 0 \rightarrow X^2\Pi, v'' = 0$). The intersection of the detection system aperture and the resonance radiation beam defined a fluorescence viewing zone at the center of the reaction vessel whose cross-section was ~2 cm in diameter. This region was well separated from the reaction vessel walls, thus minimizing wall losses of the OH radicals. The reaction cell was enclosed in a furnace which could be held constant to better than $\pm$1 K over the temperature range 295-475 K, and the gas temperature was measured by a Chromel/Alumel thermocouple mounted inside the reaction vessel.

The flash lamp was typically operated at discharge energies of 25-50 joules per flash at repetition rates of one flash every three seconds. Signals were obtained by photon counting in conjunction with multichannel scaling. OH radical decay curves were accumulated from 30-1050 flashes, depending on the signal strengths. OH half-lives ranged from 1.83-113 msec, and the OH radical concentrations were followed over at least three half-lives. In all cases the flash duration ($\geq$1 μsec) was negligible in comparison to the OH radical half-lives encountered.

In order to avoid the accumulation of photolysis or reaction products, all experiments were carried out under flow conditions so that the gas

mixture in the reaction vessel was replenished every few flashes. The partial pressure of H_2O in the reaction cell was ~0.02 torr. The argon used had a purity level of $\geq$99.998%, according to the manufacturer, while the methoxybenzene and o-cresol had stated purity levels of $\geq$99%. In addition, the o-cresol was distilled prior to use and stored under argon.

A known fraction of the total argon flow was saturated with the aromatic vapor at 273 K (methoxybenzene) or 293 K (o-cresol). Aromatic partial pressures in this fraction of the total flow were determined by their ultraviolet absorption using a 9.0 cm pathlength cell and a Cary 15 spectrophotometer. The absorption cell was calibrated using known pressures of the aromatics as measured by an MKS Baratron capacitance manometer. All flows were monitored by calibrated flowmeters, and the gases were premixed before entering the reaction vessel. Prolonged flowing of the o-cresol and, to a lesser extent, of methoxybenzene, was necessary in order to obtain steady-state gas phase concentrations of these aromatics during the determinations of rate data.

C. Results

OH radical decays were obtained for the reaction of OH radicals with methoxybenzene and o-cresol over the temperature range 299-435 K at a total pressure of ~100 torr of argon. The experimental observations were entirely analogous to those recently reported (48) for the aromatic hydrocarbons. Thus non-exponential OH radical decays were observed over the temperature region ~330-390 K, with the decay rates decreasing with time after the flash. For the temperature regions 299 K < T $\lesssim$ 330 K and 390 K < T $\lesssim$ 435 K the OH decays were exponential, obeying the integrated rate expression

$$[OH]_{t_o}/[OH]_t = S_o/S_t = \exp[(k_o + k[\text{aromatic}])\ (t-t_o)] \qquad \text{(I)}$$

where $[OH]_{t_o}$ and $[OH]_t$ are the concentrations of OH at times t_o and t, respectively, S_o and S_t are the corresponding resonance fluorescence intensities, k_o is the first-order rate for removal of OH in the absence of added reactant (primarily attributed to diffusion out of the viewing zone and to reaction with impurities), and k is the rate constant for the reaction

$$OH + \text{aromatic} \rightarrow \text{products}$$

The rate constants, k, obtained at 400 K were a factor of ~6 lower than those at 299 K.

As in the previous work (48), rate constants k were determined as a function of temperature from either (a) the dependence of the OH radical decay rate on the aromatic concentrations, as shown in Figure 3 for o-cresol and methoxybenzene at ~299 K and ~423 K, or (b) from a single OH decay rate, R at a known aromatic concentration, using equation (II).

$$R = (t-t_o)^{-1} \ln S_o/S_t = k_o + k[\text{aromatic}] \qquad \text{(II)}$$

This latter method obviously has a somewhat larger degree of uncertainty, partially associated with the estimation of the OH decay rates in the absence of reactant, $R = k_o$. However, for OH decay rates $\geq$200 sec^{-1}, any error associated with the estimation of k_o (which was typically 10-20 sec^{-1}) was <5%. Values of k_o were estimated using values obtained by method (a) for the same aromatic at similar temperatures. The error limits given in Table 9 and shown in Figure 4 are the estimated overall limits, which, for method (a), include the least square standard deviations (1-3%) as well as the estimated accuracy limits of other paramters such as total pressure and the aromatic concentrations in the reactant mixture. Using method (a), the experimental decay rates in the range typically used for method (b), R $\geq$200 sec^{-1}, were within 5% of those calculated from least squares analysis of the data. Hence this spread is indicative of the random errors associated with method (b), and is included in the overall error limits for method (b) (Table 9 and Figure 4). For o-cresol the overall error limits are estimated to be approximately $\pm$20% on account of greater errors in the ultraviolet absorption calibration. However, the relative rate constants for o-cresol are estimated to be accurate to approximately $\pm$5-10%.

Table 9 gives the rate constants obtained at the temperatures used, and Figure 4 shows the data plotted in Arrhenius form. The solid lines for $T \lesssim 330$ K and for $T \gtrsim 390$ K were obtained from least squares fitting of the data in these temperature regions, while the dashed lines between these temperature regions merely indicate the trend of the data.

D. Discussion

From the initial OH radical concentrations and the aromatic concentrations used, it can be estimated that errors in the measured rate constants

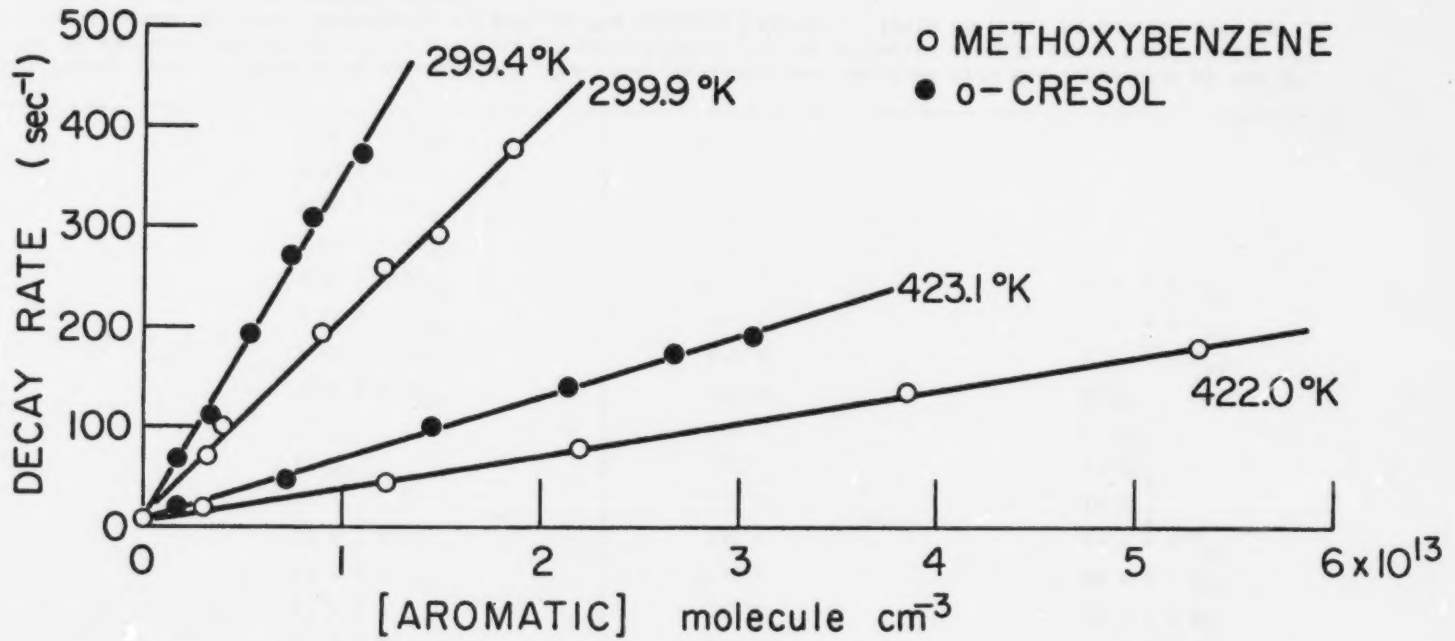


Figure 3. Plots of the OH Radical Decay Rate Against Concentration for Methoxybenzene at 299.9 and 422.0 K and for o-Cresol at 299.4 and 423.1 K. Total pressure ~100 torr of argon.

Table 9. Rate Constants, k, for the Reaction of OH Radicals with Methoxybenzene and o-Cresol

Methoxybenzene		o-Cresol	
Temperature K	10^{12} x k cm^3 $molecule^{-1}$ sec^{-1}	Temperature K	10^{12} x k cm^3 $molecule^{-1}$ sec^{-1}
299.9	19.6 ± 2.4[a]	299.4	34.1 ± 6.8[a]
309.0	17.3 ± 2.6[b]	310.6	29.3 ± 5.9[b]
309.7	17.5 ± 2.6[b]	322.0	29.8 ± 6.0[b]
318.5	17.5 ± 2.6[b]	330.7	26.8 ± 5.4[b]
321.7	17.8 ± 2.7[b]	335.4	25.5 ± 5.1[b]
329.5	12.7[c]	344.4	18.5[c]
357.4	6.7[c]	356.5	15.0[c]
370.4	3.0[c]	385.8	6.4[c]
385.5	3.33 ± 0.50[b]	392.8	6.0[c]
392.3	3.25 ± 0.50[b]	400.6	5.6 ± 1.1[b]
404.1	3.31 ± 0.50[b]	407.8	5.4 ± 1.1[b]
413.2	3.90 ± 0.56[b]	423.1	6.2 ± 1.2[a]
417.9	2.85 ± 0.43[b]		
422.0	3.30 ± 0.40[a]		
428.7	2.76 ± 0.41[b]		
435.3	2.72 ± 0.41[b]		

a) OH radical decays were observed to be exponential. The rate constants were obtained from the dependence of the OH decay rates on aromatic concentration. The indicated error limits are the estimated overall error limits which include the least square standard deviations, as well as the estimated accuracy limits of other parameters such as aromatic concentrations in the reactant mixture.

b) OH radical decays were observed to be exponential. The rate constants were obtained from the OH decay rate at a single aromatic concentration. The indicated error limits are the estimated overall error limits.

c) OH radical decays were observed to be nonexponential. Rate constants were obtained from the initial OH decay rate at a single aromatic concentration. No realistic error limits can be given to the nonexponential behavior of the OH decays, and, in extreme cases, the rate constants given indicate the order of magnitude only.

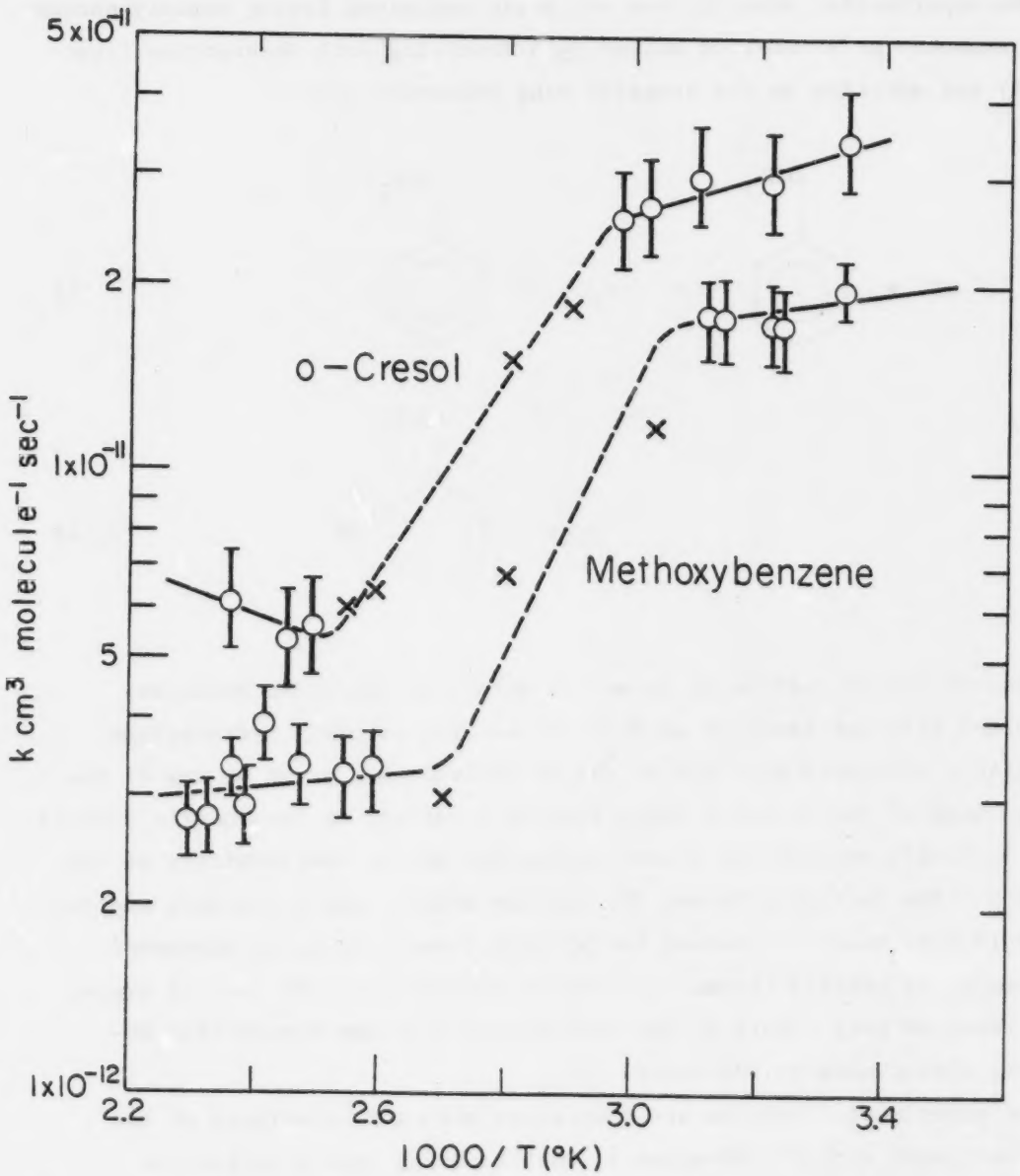


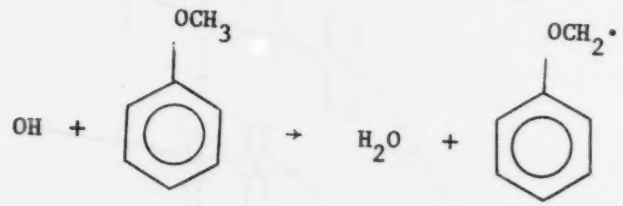
Figure 4. Arrhenius Plots of log k Against 1000/T(K) for Methoxybenzene and o-Cresol.

o Exponential OH radical decays observed.

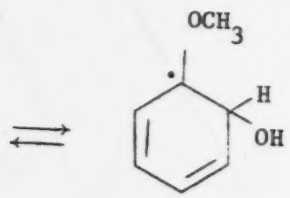
x Non-exponential OH radical decays observed. The dashed lines merely reflect the trend of the data in temperature regions where non-exponential decays are observed.

due to reaction of OH radicals with reaction products would be typically <5-10%, using an assumed rate constant of 10^{-10} cm^3 $molecule^{-1}$ sec^{-1} for the reaction of OH radicals with all reaction products.

The experimental observations are again explained (using methoxybenzene as an example) by a reaction scheme (48) involving both abstraction (reaction I) and addition to the aromatic ring (reaction II).



(1)



(2,-2)

Addition of the OH radical is shown for attack at the ortho position by analogy with the reaction of $O(^3P)$ atoms with aromatic hydrocarbons (42,44,46); obviously addition of the OH radicals may occur at any of the carbon atoms of the aromatic ring, forming a variety of OH-aromatic adducts which initially contain the excess energy due to the exothermicity of the reaction. The initially formed OH-aromatic adduct, which contains approximately 18 kcal $mole^{-1}$ of excess energy (see later), will, as discussed previously, be readily thermalized in the presence of ~100 torr of argon; hence reaction (-2) refers to the decomposition to the thermalized OH-aromatic adduct back to reactants.

The experimental results are consistent with the occurrence of the above reactions with the OH-aromatic adducts being stable within the time frame of OH radical observations (1-30 msec) from 299 K to ~330 K, and being unstable for temperatures $\gtrsim$390 K. Hence, at room temperature, the measured rate constants are those for both addition and abstraction, $k = k_2 + k_2$, while at $\gtrsim$390 K only k_1, the rate constant for abstraction, is measured.

The following Arrhenius expressions for H atom abstraction (k_1) and addition to the aromatic ring (k_2) can be obtained from least squares analysis of the data in the temperature regions T = 299-325 K and T $\geq$360 K for methoxybenzene, and T = 299-340 K and T $\geq$ 400 K for o-cresol (in view of the appreciable error limits the Arrhenius activation energies are quoted to the nearest 0.1 kcal mole^{-1}):

methoxybenzene: $k_1 = 1.7 \times 10^{-12} e^{500/RT}$ cm^3 molecule^{-1} sec^{-1}

$k_2 = 3.7 \times 10^{-12} e^{800/RT}$ cm^3 molecule^{-1} sec^{-1}

o-cresol: $k_1 = 5.0 \times 10^{-11} e^{-1800/RT}$ cm^3 molecule^{-1} sec^{-1}

$k_2 = 1.6 \times 10^{-12} e^{1800/RT}$ cm^3 molecule^{-1} sec^{-1}

Because of the small temperature ranges in each region the error limits are large and extrapolation outside of these temperature ranges will give large uncertainties in the values obtained. Discussion of the individual values of the pre-exponential factors and Arrhenius activation energies has little merit in view of the large error limits, except to point out that reaction 2 has a negative temperature dependence, as previously observed (48) for the aromatic hydrocarbons (except benzene). The overall uncertainties in E_1 and E_2 are estimated to be $\pm$2 kcal mole^{-1}. By extrapolation of the data above 390 K to room temperature, the values of k_1 and $k_1/(k_1 + k_2)$ at 299 K shown in Table 10 can be obtained. These values are of a similar order of magnitude as those derived for the aromatic hydrocarbons (48).

Table 10. H Atom Abstraction Rate Constants, k_1 and the Ratio $k_1/(k_1 + k_2)$ for the Reaction of OH Radicals with Methoxybenzene and o-Cresol at 299 K

Aromatic	$10^{12} \times k_1$ cm^3 molecule^{-1} sec^{-1}[a,b]	$k_1/(k_1 + k_2)$[b]
methoxybenzene	3.9	0.2
o-cresol	2.6	0.08

[a] Extrapolated from T $\geq$380 K to 299 K using the Arrhenius line in Figure 2.
[b] Error limits are estimated to be approximately a factor of two.

The rate constant k-2 for the thermalized OH-aromatic adduct is given by

$$k_{-2} = A_{-2}\, e^{-E_{-2}/RT} \qquad \text{(III)}$$

As noted above, OH radicals are monitored with the present experimental systems for ~1-30 msec after the flash, and significant nonexponentiality of the OH decay curves was observed at temperatures from ~330-390 K. Hence the half-life of the OH-aromatic adduct must be of the order of ~5-10 msec in this temperature range, corresponding to k_{-2} ~100 sec^{-1} at 360 K. For A_{-2} estimated to be 3×10^{13} sec^{-1} [of the same order of magnitude as the A factors for decomposition of the cyclohexadienyl (49) and methylcyclohexadienyl radicals (50)] the activation energy for reaction (-2) becomes E_{-2} ~18 kcal $mole^{-1}$. (Individual data are given in Table 11).

From equation (III) the half-lives of the OH-aromatic adducts can be estimated to be 0.33 sec at 299 K, 19 msec at 330 K, 0.28 msec at 390 K and 0.03 msec at 435 K. These values of A_{-2} and E_{-2} thus give half-lives of the OH-aromatic adducts which are totally consistent with both the reaction scheme discussed above and the experimental observations.

Knowing the activation energies of reactions (2) and (-2), the heats of formation of the OH-aromatic adducts can be obtained as (51):

$$H_f(\text{OH-aromatic adduct}) = H_f(\text{aromatic}) + H_f(\text{OH}) - H_2$$

where H_2 is the enthalpy of reaction (2) and

$$H_2 = E_{-2} - E_2 + RT$$

where E_{-2} and E_2 are the activation energies for reactions (-2) and (2) respectively.

Table 11 gives the Arrhenius activation energies E_{-2} and E_2 used together with the experimental and calculated heats of formation H_f of the OH-aromatic adducts. The calculated values of H_f (OH-aromatic adduct) were obtained as in the previous work (48), except that a stabilization energy of 19.0 kcal $mole^{-1}$ was found to give the best fit between the experimental and calculated values of H_f (OH-aromatic adduct). This values is similar to, though somewhat higher than, that of 16.5 kcal $mole^{-1}$ previously determined for the aromatic hydrocarbons (48). While

Table 11. Arrhenius Activation Energies for Reactions (2) and (-2) and Heats of Formation ΔH_f for the OH-Aromatic Adducts

Aromatic	E_2 kcal mole^{-1}	E_{-2} kcal mole^{-1}(a)	H_f kcal molecule^{-1} Aromatic	OH-aromatic adduct Exp(b)	OH-aromatic adduct Calc(c)
Methoxybenzene	-0.8 ± 2	18.1 ± 2	-18.00(d)	-28.4 ± 4	-29.5
o-Cresol	-1.8 ± 2	19.1 ± 2	-30.74(e)	-43.1 ± 4	-42.6

(a) E_{-2} obtained using $A_{-2} = 3 \times 10^{13}$ sec^{-1}, $k_{-2} = 100$ sec^{-1} at the temperature corresponding to the midpoint of the dashed lines in Figure 4. Indicated error limits are equivalent to a factor of 100 in A_{-2}/k_{-2} at the temperature of midpoint of the dashed lines of Figure 4.

(b) Calculated using $\Delta H_f(OH) = 9.2 \pm 1$ kcal mole^{-1} (52) and ΔH_f (OH-aromatic adduct) = ΔH_f (aromatic) + $\Delta H_f(OH)$ - ($E_{-2} - E_2 + RT$).

(c) Calculated from group additivity rules, using a stabilization energy for the radicals of 19.0 kcal mole^{-1}. The calculated values of ΔH_f refer to the following cyclohexadienyl radicals: for methoxybenzene, 1-methoxy-2-hydroxy and for o-cresol, 1-methyl-2,3-dihydroxy. These radicals were obtained by assuming the OH radical attack occurs ortho to the methoxy and hydroxy groups, respectively, analogous to $O(^3P)$ reaction.

(d) Reference 51.

(e) Reference 53.

these two stablization energies are equivalent within the error limits (estimated at ± 5 kcal mole^{-1}), a trend to a higher stabilization energy for the radicals produced from methoxybenzene and o-cresol may be expected as the methoxy and hydroxyl substituents will stabilize the OH-aromatic adducts via interaction of the electrons of the oxygen atom with the aromatic ring (54).

7. THE GAS PHASE REACTION OF O_3 WITH A SERIES OF AROMATIC HYDROCARBONS

Although a large amount of rate of product information exists for the gas phase reactions of ozone with olefinic hydrocarbons, little data are available for the reactions of O_3 with the aromatic hydrocarbons. No systematic studies have been carried out, but the aromatic hydrocarbons appear to be relatively unreactive towards ozone with room temperature rate constants of the order of 10^{-20} cm^3 molecule^{-1} sec^{-1} (55-57). The only gas phase product data available are indirectly derived from the NO_x photooxidation of a series of aromatic hydrocarbons carried out by Nojima, Fukaya, and Kanno (58) where α-dicarbonyls (glyoxal, methylglyoxal, and biacetyl) were observed as products.

In this work, rate constants for the gas phase reaction of O_3 with a series of aromatic hydrocarbons have been determined at 297 ± 2 K from O_3 decay rates in the presence of excess reactant. Acetylene was included in the reactants studied since its room temperature rate constant is reasonably well known (57,59-61) and hence could be used as a check on the experimental technique. Product analyses were also carried out for the reaction of O_3 with selected aromatic hydrocarbons.

A. Experimental Methods

The reaction cell was a stirred 23 liter cylindrical Pyrex vessel which could be routinely evacuated to ≤2 x 10^{-5} torr. O_3-reactant mixtures were prepared by filling calibrated volumes with reactants to known pressures, and then expanding them into the evacuated reaction vessel. The reaction vessel was then pressuized to 760 torr with synthetic air (N_2/O_2 = 4.0) prepared from O_2 (≥99.99% purity) and N_2(≥99.998% purity). Pressures were measured by a 0-10 torr MKS Baratron gauge or by a 0-800 torr Wallace and Tiernan FA-160 absolute pressure gauge. All reactions were carried out at 297 ± 2 K.

O_3 concentrations were monitored by a NO-O_3 chemiluminesent detector operated at ~2 torr total pressure. A sample flow rate of 3.0 cm^3 sec^{-1} at STP and NO flow rate of 45.0 cm^3 sec^{-1} at STP were used. The NO_2 emission was detected by a cooled EMI 9558A photomultiplier tube fitted with a cut-off filter transmitting λ≥4700 Å. This instrument was calibrated by

monitoring O_3 concentrations as determined by long-path (40 meter) infrared absorption spectroscopy at 9.48 μ using a Perking-Elmer 621 infrared spectrophotometer and the 9.48 μ ozone extinction coefficient of Hanst, Stephens, Scott, and Doerr (62), and was linear over the range (0.25-125) x 10^{13} molecule cm^{-3}.

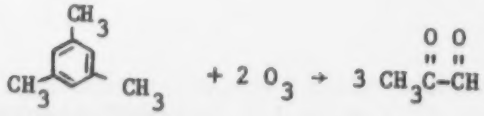
Reaction products were anlyzed by gas chromatography using both a 50 cm x 0.3 cm Teflon column, packed with Carbowax 400 on 60/80 firebrick, operated at 297 K with an electron capture detector and a 300 cm X 0.3 cm stainless steel column, packed with Carbonwax 600 on 60/80 firebrick, operated at 373 K with a flame ionization detector. In addition, product analyses were carried out by using long-path (40 meter) infrared absorption spectroscopy and by a Finnigan 3100D combined gas chromatograph-mass spectrometer.

Gas chromatographic analysis showed that all reactants had a purity of ≥98%. Approximately two percent O_3 in O_2 was prepared by passing O_2 (≥99.99% purity) through a Welsbach T-408 ozonizer.

B. Products

Table 12 shows the results of qualitative product analyses carried out for the reactions of O_3 with toluene, o-xylene and 1,3,5-trimethylbenzene. The major products observed from the reaction of O_3 with these aromatic hydrocarbons were α-dicarbonyls, in agreement with the observations of Nojima, Fukaya, Fukui and Kanno (58) on the gas phase NO_x photooxidation of these compounds.

A quantitative product analysis was carried out for the reaction of ozone with 1,3,5-trimethylbenzene using long-path infrared absorption spectroscopy. Figure 5 shows a typical time dependence of the product and reactant concentrations. From the data at short reaction times, it can be calculated that Δ[methylglyoxal]/Δ[1,3,5-trimethylbenzene] = 3.0 ± 0.5 and Δ[O_3]/Δ[1,3,5-trimethylbenzene] = 2.0 ± 0.3. These results suggest the following stoichiometry:



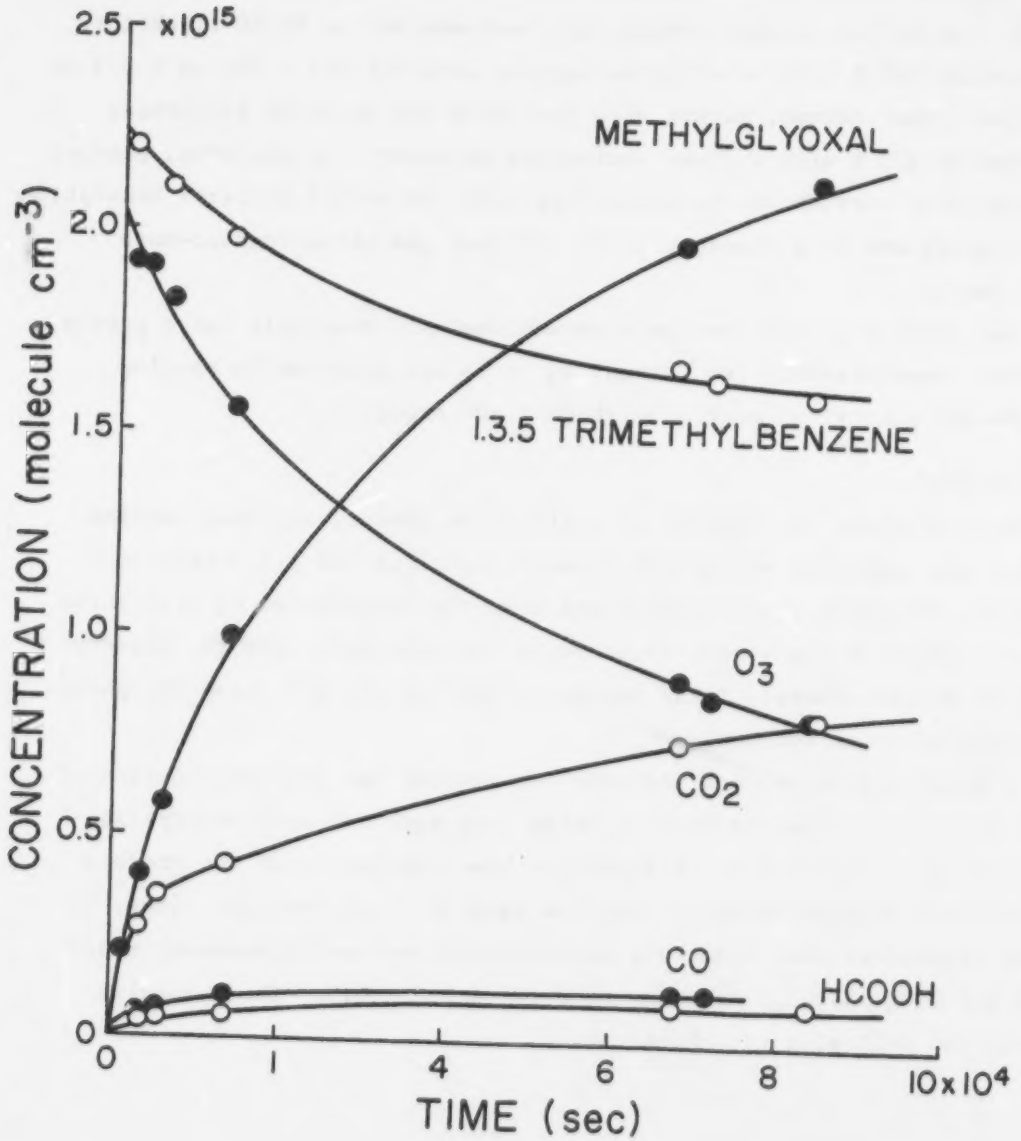


Figure 5. Plot of Reactant and Product Concentrations Against Time for the Reaction of O_3 with 1,3,5-Trimethylbenzene.

Table 12. Products Observed for the Reaction of O_3 with Toluene, o-Xylene and 1,3,5-Trimethylbenzene

Reactant	Method A	Method B	Method C
Toluene	methylglyoxal glyoxal	benzaldehyde	CO, CO_2, HCO_2H CH_3CO_2H methyl- glyoxal, glyoxal
o-Xylene	glyoxal methylglyoxal biacetyl	biacetyl o-tolualdehyde	CO, CO_2, HCO_2H CH_3CO_2H, methyl- glyoxal
1,3,5-Trimethyl- benzene	methylglyoxal	-	CO, CO_2, HCO_2H methylglyoxal, CH_3CO_2H

Method A 50 cm X 0.3 cm Teflon column, packed with Carbowax 400 on 60/80 firebrick, operated at 297 K with an electron capture detector.

Method B 300 cm X 0.3 cm stainless steel column, packed with Carbowax 600 on 60/80 firebrick, operated at 373 K with a flame ionization detector.

Method C Long-path infrared analysis in a 40-meter gas cell coupled to a Perkin-Elmer 621 infrared spectrometer.

Carbon balances averaged over the three runs were (105 + 15%) with methylglyoxal accounting for $\geq$85% of the product carbon. The other minor products (CO, CO_2, HCOOH and CH_3COOH) observed in this reaction were also obtained from the ozonolysis of methylglyoxal, although their time dependence (Figure 5) indicates that they are primary products. It was also observed that $\Delta[O_3]/\Delta[\text{aromatic}] = 1.9 \pm 0.4$ for the reactions of O_3 with toluene and o-xylene indicating that the stoichiometry was 2.0 for the reactions of O_3 with all the aromatic hydrocarbons studied.

C. Kinetics

Rate constant determinations were carried out under conditions such that the reactant concentration was always in excess of the O_3 concentration

([reactant]/[O_3] $\geq$ 20). Hence, the pseudo-first order decay of ozone is given by the integrated rate expression

$$\ln([O_3])_0/[O_3] = (k_1 + nk_2\,[\text{reactant}])\,(t-t_0)$$

where $[O_3]_0$, $[O_3]$ are the O_3 concentrations at times t_0 and t, respectively, k_2 is the first order decay of O_3 (attributed to heterogeneous wall decomposition), k_2 is the rate constant for the reaction

$$nO_3 + \text{reactant} \rightarrow \text{products}$$

and n is the stoichiometry factor. The decays of O_3 were observed to be exponential over 1-3 half-lives and were reproducible to within $\pm$ 10%. Values of nk_2 were obtained from the slopes of plots of the O_3 decay rate, defined as $(t-t_0)^{-1} \ln [O_3]_0/[O_3]$, against reactant concentration, such as those shown in Figure 6 for benzene, toluene, m-xylene and 1,2,4-trimethylbenzene. In the absence of reactant, the O_3 decay rates k_1 varied from (1.7-5.9) X 10^{-6} sec^{-1}. The stoichiometry factor, n, has been shown to be 1.0 for the reaction of O_3 with acetylene (9,60) and a value of n = 2.0, as determined for toluene, o-xylene and 1,3,5-trimethylbenzene, was used for the aromatic hydrocarbons. In the case of methylglyoxal, a stoichiometry factor n = 1 was assumed. The rate constants k_2 so obtained are given in Table 13. The rate constant for the reaction of O_3 with methylglyoxal, a typical major product from the reaction of O_3 with the aromatic hydrocarbons studied, is approximately of the same order of magnitude as those for the individual aromatic hydrocarbons. At the low conversions of aromatic hydrocarbons used, (2-5%), secondary reactions should be minimal and thus the rate constants k_2 determined should be close to those for the primary reaction.

Table 13 also shows that the rate constant determined in this study for the reaction of O_3 with acetylene is in reasonably good agreement with the values obtained by Cadle and Schadt (59), DeMore (60,61) and Stedman and Niki (57). The rate constants k_2 obtained in this work for the xylenes and 1,3,5-trimethylbenzene are also consistent with the upper limits determined by Hanst, Stephens, Scott and Doerr (56) and Stedman and Niki (57) and by Bufalini and Altshuller (55) respectively.

However, the present rate constant for the reaction of O_3 with toluene is much lower than that determined by Stedman and Niki (57). No immediate reason for this discrepancy is obvious. The rate constants k_2

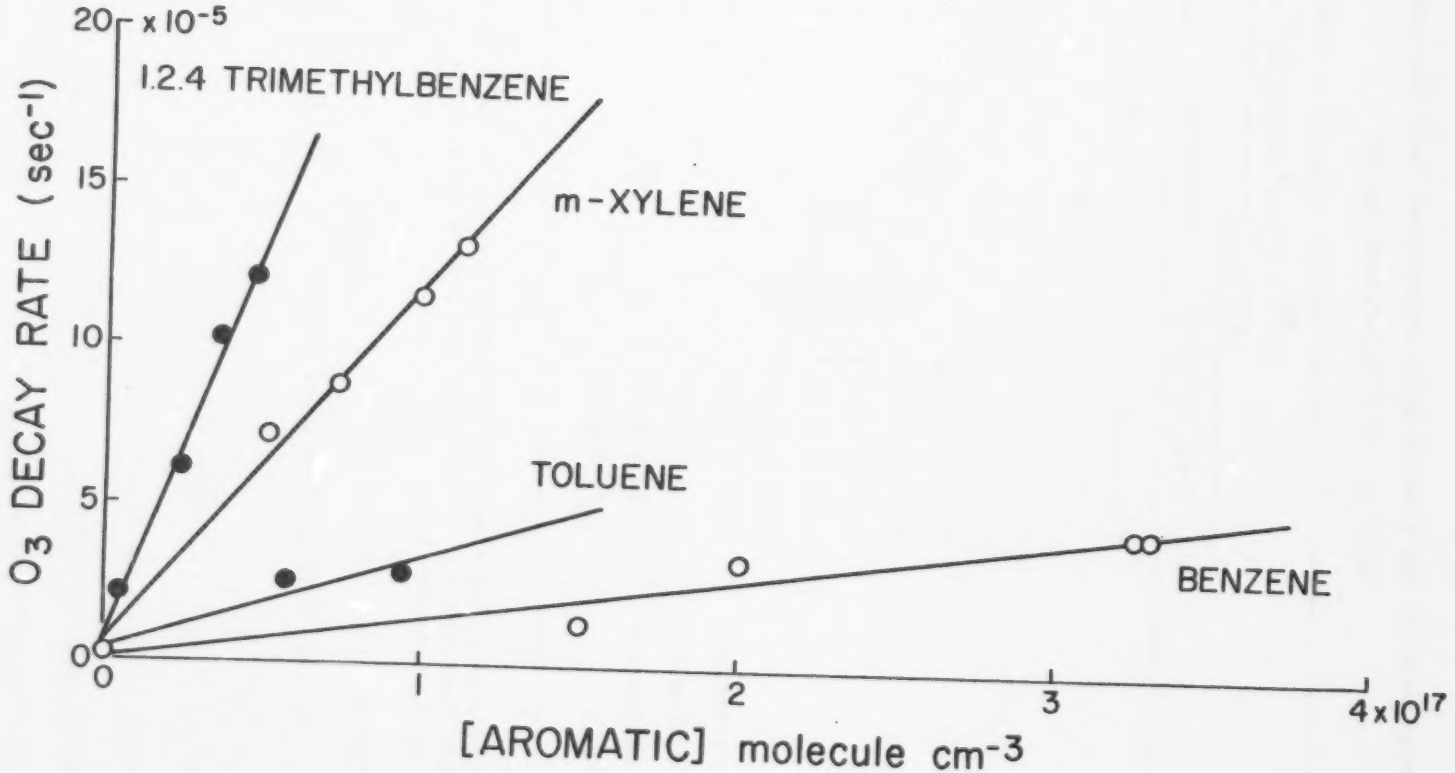


Figure 6. Plot of the O_3 Decay Rate Against Aromatic Hydrocarbon Concentration for Benzene, Toluene, m-Xylene and 1,2,4-Trimethylbenzene.

Table 13. Comparison of the Present Room Temperature Rate Constants k_2 with Selected Literature Values

	$10^{20} \times k_2$ cm^3 molecule^{-1} sec^{-1}		
	Gas Phase		
	This Work (297±2°K)[a]	Literature	CCL_4 Solution[h]
Acetylene	3.8 ± 0.6	7.8 ± 2.8[b]	
		5.9[c]	
		3.0 ± 0.5[d]	
		8.6 ± 0.9[e]	
Benzene	0.007 ± 0.004		0.0047 ± 0.0003
Toluene	0.015 ± 0.008	1.2 ± 0.6[e]	0.028 ± 0.001
o-Xylene	0.07 ± 0.02		0.14 ± 0.01
m-Xylene	0.06 ± 0.02	< 0.5[e]	0.13 ± 0.01
p-Xylene	0.04 ± 0.02	< 20[f]	0.16 ± 0.01
1,2,3-Trimethylbenzene	0.16 ± 0.04		0.47 ± 0.05
1,2,4-Trimethylbenzene	0.13 ± 0.03		0.47 ± 0.05
1,3,5-Trimethylbenzene	0.22 ± 0.06	< 10[g]	0.70 ± 0.07
Methylglyoxal	0.11 ± 0.05		

[a] The indicated error limits are the estimated overall error limits. Stoichiometry factors: n = 1 for acetylene and methylglyoxal, n = 2 for the aromatic hydrocarbons.

[b] Cadle and Schadt (59), T = 303 K.

[c] DeMore (60), derived from Arrhenius expression, T = 297 K.

[d] DeMore (61), T = 294 K.

[e] Stedman and Niki (57), T = 298 K.

[f] Hanst, Stephens, Scott and Doerr (56).

[g] Bufalini and Altshuller (55).

[h] Nakagawa, Andrews and Keefer (63), T = 298.4 K.

for the aromatic hydrocarbons show a similar trend with the degree of alkylation as do those for the reaction of the aromatic hydrocarbons with $O(^3P)$ atoms (64) and with OH radicals (65,66), indicating the electrophilic character of O_3 in these reactions. Table 13 also includes the rate constants obtained by Nakagawa, Andrews and Keefer (63) in CCl_4 solution. It can be seen that there is a close correspondence of the rate constants obtained in CCl_4 solution with those obtained in the present work in the gas phase. Such a correspondence between solution phase and gas phase rate constants has previously been noted (67) for several paraffinic hydrocarbons.

The rate constants, k_2, determined in this work lead to aromatic hydrocarbon half-lives in the presence of 0.1 ppm (2.47×10^{12} molecule cm^{-3}) of O_3 (typical levels in a polluted urban atmosphere) ranging from ~2 years for 1,3,5-trimethylbenzene to ~90 years for benzene. Hence, their reaction with O_3 will be a negligible loss process in polluted urban atmospheres compared to their reaction with OH radicals (65).

VIII. CHEMICAL IONIZATION MASS SPECTRUM OF PEROXYACETYLNITRATE (PAN)

Attempts (68,69) to measure the molecular weight of PAN using conventional and time-of-flight mass spectrometers, both equipped with electron impact (E.I.) ion sources, were unsuccessful in that no molecular ion was observed. However, the more stable molecular ion of the homologous molecule, peroxybenzoylnitrate, has been detected using E.I. ionization (70). Because chemical ionization (C.I.) leads to less fragmentation than does ionization by electron impact (71-74), C.I. mass spectra of oxygen-containing substrates usually contain substantial $[M + H]^+$ peaks formed by proton transfer from the reagent gas. Therefore, we sought to determine the molecular weight of PAN by obtaining a C.I. mass spectrum of PAN, which contained a $[M + H]^+$ ion.

A. Experimental

PAN (1000 ppm in N_2) was prepared and analyzed by the method of Stephens (75,76). It was separated from traces of CH_3ONO, CH_3ONO_2, CH_3NO_2 and $C_2H_5ONO_2$ by introduction into the ion sources of a quadrupole mass spectrometer using an all-glass gas chromatographic inlet system. The total ion current chromatogram presented in Figure 7 shows that all impurity peaks were well resolved from the PAN peak. Mass spectral scans of the PAN peak

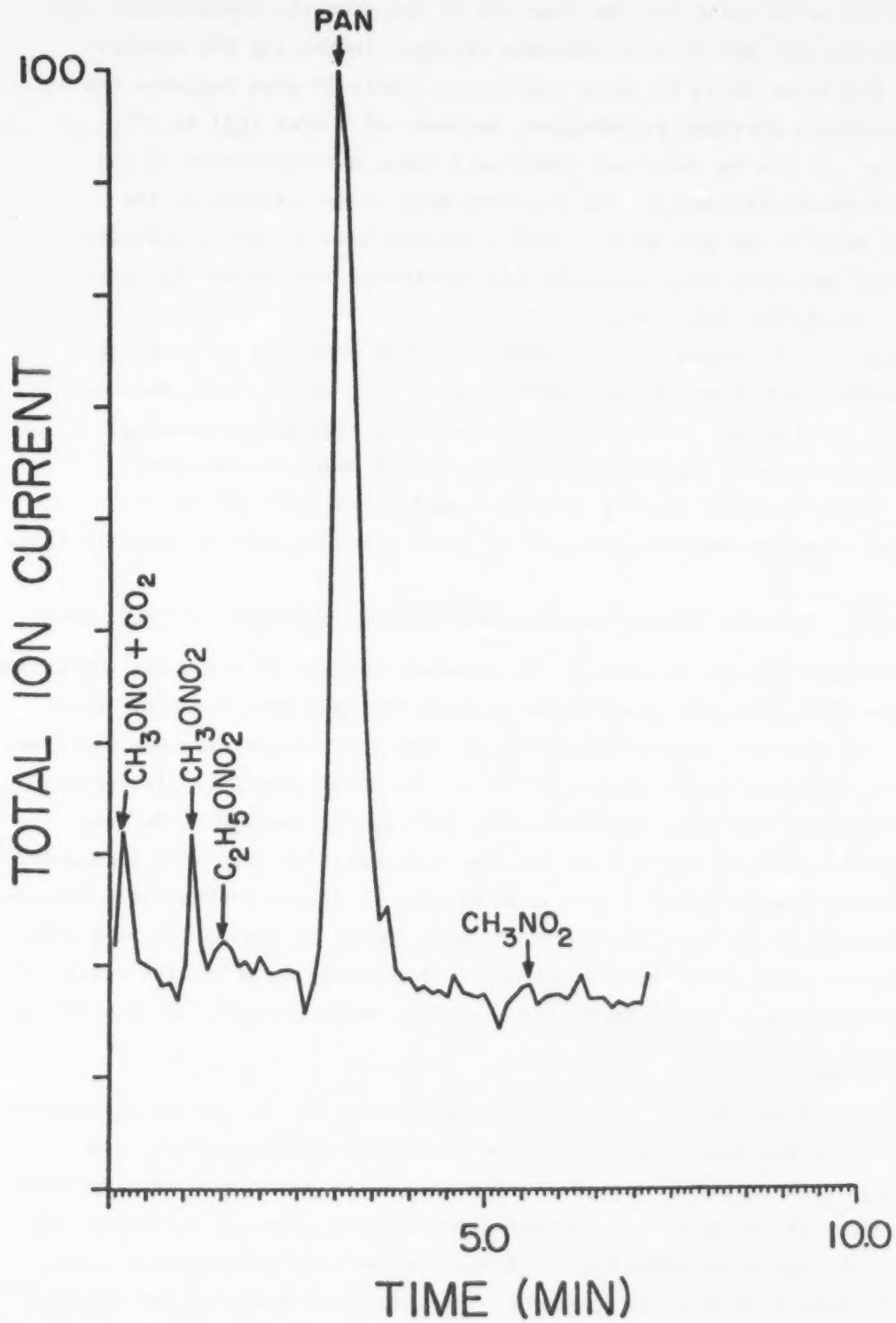


Figure 7. Total Ion Current Chromatogram of PAN (1000 ppm in N_2).

taken early and late during its elution gave identical mass spectra. Therefore, the PAN peak did not contain any unresolved contaminant.

Mass spectra were recorded using a Finnigan 3200 quadrapole mass spectrometer equipped with a C.I. ion source, an all-glass gas chromatographic inlet system and a computer data acquisition system. PAN samples (1000 ppm in N_2) were introduced into the mass spectrometer using the gas chromatographic inlet system equipped with a 1 m x 2 mm Teflon column packed with 5% Carbowax E-400 on 60/80 mesh, acid washed-DMCS treated Chromosorb W (77,78). Methane and isobutane reagent gas flow rates were 30 ml min^{-1}. Operating temperatures and mass spectrometer settings were as follows: g.c. injector and column, separator oven and transfer line temperatures, all 25 C; ion source temperature, 60 C; reagent gas ion source pressures, 0.4 and 1.0 Torr for CH_4 and 0.2 Torr for i-C_4H_{10}; electron energy, 152 eV; electron multiplier voltage, 1.9 kV.

B. Results and Discussion

Table 14 summarizes the C.I. mass spectrum of PAN obtained using methane and isobutane reagent gases. With both reagent gases, the ion with the largest mass in the mass spectrum of PAN appears at m/e 122. Two observations confirm that this ion is the $[M + H]^+$ of PAN. First, the intensity of the ion increases dramatically when the reagent gas is changed from CH_4 to i-C_4H_{10} and, second, when the pressure of CH_4 is adjusted (0.4 Torr) so as to maximize the intensity of the m/e 122 peak, a small peak at m/e 150 (M + 29) appears in the methane C.I. mass spectrum of PAN. Therefore, the molecular weight of PAN is 121 a.m.u.

The intense fragment ions at m/e 42 $[CH_3CO]^+$ and m/e 46 $[NO_2]^+$ detected using CH_4 as reagent gas are most likely formed by the following decomposition pathways.

$$\text{PAN} + [CH_5]^+ \longrightarrow CH_4 + [\text{PANH}]^+ \begin{cases} \longrightarrow CH_3CO_3H + [NO_2] & \text{I} \\ \longrightarrow [CO_3CO]^+ + O_2 + HNO_2 \quad (\text{m/e } 43) & \text{II} \end{cases}$$

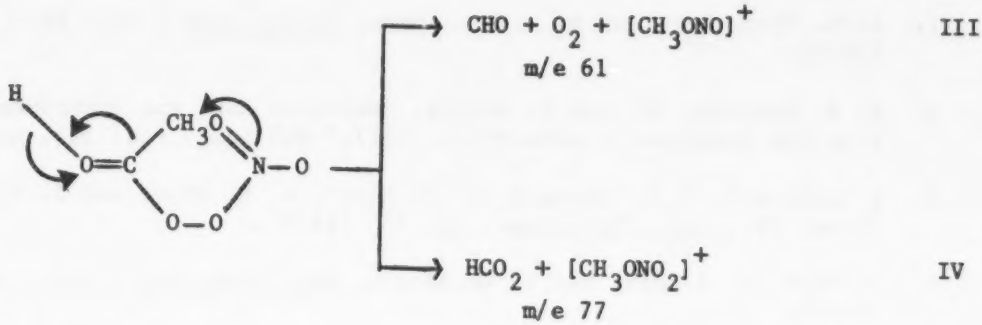
Table 14. Chemical Ionization Mass Spectra of PAN

m/e	Ion Intensity (% of base peak) CH_4[a]	$i\text{-}C_4H_{10}$[b]	Ion
122	3.5	100.0	$[M + H]^+$
121	0.5	15.1	$[M]^+$
120	—	1.9	$[M - 1]^+$
88	1.0	1.7	$[O\ CCH_2ONO]^+$
77	0.3	4.6	$[CH_3ONO_2]^+$
61	1.7	13.0	$[CH_3ONO]^+$
57	2.1	↑	$[CHCO_2]^+$
56	0.4		
55	0.6	not	
48	0.4		
46	100.0	scanned	$[NO_2]^+$
45	12.0		$[HCO_2]^+$
44	1.4		$[CO_2]^+$
43	45.1		$[CH_3CO]^+$
42	5.4	↓	$[CH_2CO]^+$

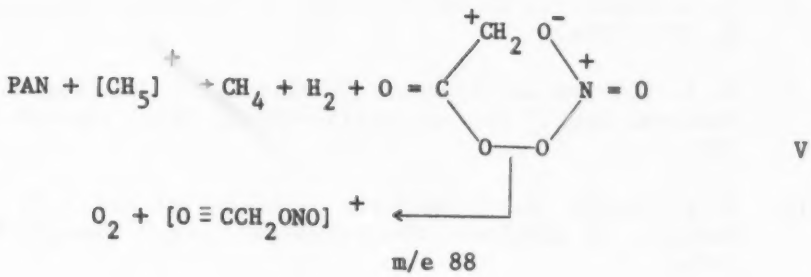
[a]Pressure, 1.0 Torr; mass range 42-300 a.m.u.

[b]Pressure, 0.2 Torr; mass range 60-300 a.m.u.

The ions at m/e 61 and 77 are most probably $[CH_3ONO]^+$ and $[CH_3ONO_2]^+$ formed by CH_3 transfer to NO_2 via a cyclic six-membered transition state:



Because the PAN spectrum does not contain ions at m/e 62 and 78 (the $[M + H]^+$ ions corresponding to CH_3ONO and CH_3ONO_2) the ions at m/e 61 and 77 cannot be caused by tailing of the CH_3ONO or CH_3ONO_2 impurities. The following decomposition path may possibly explain the ion at m/e 88:



The three fragmentation pathways depicted by paths I, III and V are all consistent with the formulation of PAN as peroxyacetylnitrate, $CH_3(CO)OONO_2$ (68), and are not consistent with its formulation as acetylpernitrate, $CH_3(CO)ONO_3$ (79). This conclusion is also supported by simple valence considerations (80) and a recent infrared study of ^{15}N labeled PAN. Thus, the C.I. mass spectral evidence reported here confirms PAN's molecular weight, which had previously been inferred from chemical properties (68,82), and supports PAN's commonly accepted structure $CH_3(CO)OONO_2$.

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APPENDIX: DETAILED DATA SHEETS

EC - 77
TOLUENE
1975 MAY 20

BEGIN IRRADIATION 1100, 0.25 INCH PYREX FILTER
OZONE MONITORED WITH DASIBI 1212 AND MONITOR LABS INSTRUMENTS
TEMPERATURE NOT MONITORED; STANDARD CONTROL PROCEDURE USED AS FOR 85 DEG F RUNS
BUBBLER STARTED AT 1518 FOR TRAPPING OF ACIDIC PRODUCTS, VOL IN MCHJ VOL COLUMN
CO FACTOR 2.84/1.328; BECKMAN 6800 USED
PAN CALIB 9 (X1.05)

T=0 AT 1100 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	39.47
SSPOWER	KW	AVERAGE	19.73
RADIOM	MW/CM2	AVERAGE	0.140
NO	PPM	INIT COND	0.518
NO2-CORR	PPM	INIT COND	0.058
CO	PPM	INIT COND	1.683
HCHO	PPM	INIT COND	0.003
ACETALD	PPM	INIT COND	0.001
TOLUENE	PPM	INIT COND	0.276

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.399 L/MIN

64 GC SAMPLES TAKEN

EC - 77
TOLUENE
1975 MAY 20

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM CASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOx-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM
1100	0.	0.0	0.0	0.518	0.058	0.574	0.276	1.68	0.000	0.003	0.0010	******
1115	15.	0.0	0.0	0.511	0.063	0.571	0.274	1.74	******	******	******	******
1130	30.	0.0	0.0	0.501	0.070	0.569	0.272	1.72	0.000	******	0.0020	0.0050
1145	45.	0.0	0.0	0.489	0.075	0.566	0.270	1.72	******	******	******	******
1200	60.	0.0	0.0	0.474	0.088	0.559	0.260	1.74	0.000	0.004	0.0020	0.0070
1215	75.	0.0	0.0	0.457	0.100	0.557	0.252	1.69	******	******	******	******
1230	90.	0.0	0.0	0.442	0.107	0.549	0.250	1.70	0.000	******	0.0030	0.0060
1245	105.	0.0	0.0	0.427	0.114	0.544	0.244	1.73	******	******	******	******
1300	120.	0.0	0.000	0.410	0.127	0.537	0.240	1.74	0.000	0.011	0.0030	0.0060
1315	135.	0.0	0.001	0.391	0.136	0.527	0.238	1.77	******	******	******	******
1330	150.	0.0	0.001	0.371	0.151	0.520	0.230	1.77	0.000	******	0.0030	0.0100
1345	165.	0.0	0.001	0.352	0.161	0.513	0.224	1.78	******	******	******	******
1400	180.	0.004	0.001	0.332	0.171	0.503	0.220	1.80	0.000	0.013	0.0040	0.0110
1415	195.	0.002	0.001	0.313	0.180	0.493	0.216	1.77	******	******	******	******
1430	210.	0.0	0.002	0.293	0.187	0.481	0.208	1.79	******	******	0.0040	0.0120
1445	225.	0.002	0.003	0.276	0.195	0.471	0.204	1.80	******	******	******	******
1500	240.	0.002	0.003	0.256	0.204	0.461	0.196	1.82	0.001	0.015	0.0030	0.0120
1515	255.	0.004	0.003	0.239	0.211	0.448	0.196	1.84	******	******	******	******
1530	270.	0.006	0.005	0.220	0.216	0.438	0.190	1.81	0.001	******	0.0040	0.0110
1545	285.	0.004	0.006	0.205	0.224	0.426	0.185	1.97	******	******	******	******
1600	300.	0.004	0.006	0.188	0.226	0.414	0.180	1.86	******	******	******	******
1615	315.	0.008	0.007	0.176	0.228	0.402	0.178	1.85	0.001	******	******	******
1630	330.	0.010	0.009	0.159	0.236	0.392	0.172	1.87	******	******	0.0090	0.0110
1645	345.	0.010	0.011	0.144	0.233	0.377	0.168	1.85	******	******	******	******
1700	360.	0.012	0.012	0.129	0.235	0.367	0.164	1.89	0.002	******	0.0090	0.0160

EC - 77
TOLUENE
1975 MAY 20

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADIOM MW/CM2	PD #2 VOLTS	HCHO VOL L
1100	0.	41.5	19.10	******	0.457	30.00
1115	15.	41.5	******	******	0.442	******
1130	30.	41.5	******	******	0.440	******
1145	45.	41.5	******	******	0.442	******
1200	60.	41.5	19.60	0.140	0.442	30.00
1215	75.	41.5	******	******	0.442	******
1230	90.	41.0	******	******	0.442	******
1245	105.	41.0	******	******	0.440	******
1300	120.	40.5	******	******	0.440	30.00
1315	135.	40.5	19.80	0.139	0.440	******
1330	150.	40.0	******	******	0.442	******
1345	165.	40.0	******	******	0.442	******
1400	180.	39.5	******	******	0.442	30.00
1415	195.	39.5	******	******	0.442	******
1430	210.	39.5	******	******	0.442	******
1445	225.	39.0	******	******	0.445	******
1500	240.	38.5	******	******	0.445	30.00
1515	255.	38.5	19.80	0.140	0.440	******
1530	270.	38.0	******	******	0.442	27.00
1545	285.	38.0	******	******	0.442	******
1600	300.	37.5	20.20	******	0.442	30.00
1615	315.	37.5	******	******	0.442	******
1630	330.	37.0	******	******	0.442	30.00
1645	345.	37.0	******	******	******	******
1700	360.	36.5	19.90	******	0.437	15.00

EC - 78
TOLUENE
1975 MAY 28

BEGIN IRRADIATION 1045; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH CASIBI 1212 AND MONITOR LABS INSTRUMENTS
TOLUENE = 0.230 PPM AT 1025
SAMPLE 1605-1650 AT 6 L/MIN
TEMPERATURE NOT MONITORED; STANDARD CONTROL PROCEDURE USED AS FOR 85 DEG F RUNS
CO FACTOR 2.64/1.35; BECKMAN 6800 USED
PAN CALIB 9 (X1.05)

T=0 AT 1045 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	39.95
SSPOWER	KW	AVERAGE	19.70
RADIOM	MW/CM2	AVERAGE	0.137
NO	PPM	INIT COND	0.069
NO2-CORR	PPM	INIT COND	0.032
CO	PPM	INIT COND	2.040
ACETALD	PPM	INIT COND	0.004
ACETONE	PPM	INIT COND	0.005
TOLUENE	PPM	INIT COND	0.210

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.278 L/MIN

57 GC SAMPLES TAKEN

EC - 78
TOLUENE
1975 MAY 28

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM DASIBI	OZONE PPM MCNITOR	NO PPM	NO2-CORR PPM	NOx-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM
1045	0.	0.0	0.000	0.069	0.032	0.100	0.210	2.04	0.000	0.0	0.0040	0.0050
1100	15.	0.0	0.004	0.053	0.045	0.097	0.226	2.01	******	******	******	******
1115	30.	0.008	0.009	0.032	0.060	0.092	0.218	2.05	0.001	******	0.0050	0.0070
1130	45.	0.018	0.019	0.020	0.066	0.086	0.208	2.05	******	******	******	******
1145	60.	0.027	0.031	0.014	0.062	0.076	0.202	2.07	0.003	0.005	0.0060	0.0100
1200	75.	0.041	0.042	0.011	0.055	0.066	0.190	2.07	******	******	******	******
1215	90.	0.055	0.056	0.010	0.047	0.057	0.184	2.05	0.006	******	0.0060	0.0160
1230	105.	0.064	0.066	0.008	0.041	0.050	0.178	2.09	******	******	******	******
1245	120.	0.076	0.074	0.008	0.035	0.043	0.170	2.07	0.009	0.015	0.0080	0.0210
1300	135.	0.086	0.080	0.007	0.030	0.037	0.164	2.09	******	******	******	******
1315	150.	0.086	0.083	0.008	0.025	0.033	0.159	2.15	0.012	******	0.0110	0.0240
1330	165.	0.090	0.086	0.007	0.022	0.030	0.156	2.15	******	******	******	******
1345	180.	0.090	0.088	0.007	0.019	0.027	0.150	2.13	0.013	0.024	0.0070	0.0250
1400	195.	0.092	0.086	0.007	0.018	0.025	0.145	2.16	******	******	******	******
1415	210.	0.090	0.086	0.007	0.017	0.024	0.144	2.18	0.012	******	0.0110	0.0370
1430	225.	0.090	0.084	0.007	0.016	0.023	0.140	2.19	******	******	******	******
1445	240.	0.088	0.084	0.007	0.015	0.022	0.139	2.21	0.012	0.042	0.0060	0.0360
1500	255.	0.086	0.083	0.007	0.015	0.022	0.138	2.20	******	******	******	******
1515	270.	0.088	0.083	0.007	0.015	0.021	0.136	2.21	0.010	******	0.0100	0.0340
1530	285.	0.088	0.082	0.007	0.015	0.021	0.134	2.27	******	******	******	******
1545	300.	0.088	0.080	0.007	0.015	0.022	0.128	2.27	0.009	0.051	0.0100	0.0320
1600	315.	0.086	0.079	0.007	0.015	0.021	0.128	2.25	******	******	******	******
1615	330.	0.084	0.079	0.007	0.015	0.022	0.126	2.28	0.008	******	0.0100	0.0380
1630	345.	0.084	0.078	0.007	0.015	0.022	0.124	2.32	******	0.055	******	******
1645	360.	0.086	0.077	0.006	0.015	0.021	0.122	2.33	0.007	******	0.0090	0.0370

EC - 78
TOLUENE
1975 MAY 28

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER Kw	RADICM MW/CM2	PD #2 VOLTS	HCHO VOL L
1045	0.	43.0	18.70	0.127	0.445	30.00
1100	15.	43.0	******	0.133	0.440	******
1115	30.	43.0	19.60	0.137	0.440	******
1130	45.	43.0	******	******	0.442	******
1145	60.	43.0	******	******	0.437	30.00
1200	75.	42.5	******	******	0.437	******
1215	90.	42.5	19.40	0.135	0.435	******
1230	105.	41.5	******	******	0.432	******
1245	120.	41.5	******	******	0.442	30.00
1300	135.	41.0	******	******	0.437	******
1315	150.	40.5	******	******	0.442	******
1330	165.	40.0	******	******	0.440	******
1345	180.	40.0	20.00	0.139	0.437	30.00
1400	195.	39.5	******	******	0.440	******
1415	210.	39.0	******	******	0.437	******
1430	225.	39.0	******	******	0.440	******
1445	240.	38.5	20.10	0.138	0.440	30.00
1500	255.	38.0	******	******	0.435	******
1515	270.	38.0	******	******	0.442	******
1530	285.	37.5	******	******	0.445	******
1545	300.	37.5	20.40	0.145	0.445	30.00
1600	315.	37.0	******	******	0.445	******
1615	330.	37.0	******	******	0.442	******
1630	345.	36.5	******	******	0.447	30.00
1645	360.	36.0	******	0.143	******	******

EC - 79
TOLUENE
1975 MAY 29

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH CASIBI 1212 AND MONITOR LABS INSTRUMENTS
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 DEG F RUNS
CJ FACTOR 2.84/1.325; BECKMAN 6800 USED
PAN CALIB 9 (X1.05)

T=0 AT 1015 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	44.44
SSPOWER	KW	AVERAGE	19.59
RADIOM	MW/CM2	AVERAGE	0.138
NO	PPM	INIT COND	0.080
NO2-CORR	PPM	INIT COND	0.019
CO	PPM	INIT COND	2.120
HCHO	PPM	INIT COND	0.011
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.005
TOLUENE	PPM	INIT COND	0.576

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.278 L/MIN

57 GC SAMPLES TAKEN

EL - 79
TOLUENE
1975 MAY 29

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM DASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM
1015	0.	0.0	0.000	0.080	0.019	0.099	0.976	2.12	0.000	0.011	0.0020	0.0050
1030	15.	0.002	0.004	0.060	0.038	0.098	0.960	2.08	******	******	******	******
1045	30.	0.016	0.017	0.029	0.063	0.091	0.920	2.05	0.001	******	0.0020	0.0100
1100	45.	0.041	0.049	0.015	0.062	0.077	0.888	2.10	******	******	******	******
1115	60.	0.070	0.075	0.013	0.049	0.062	0.848	2.09	0.007	0.013	0.0040	0.0210
1130	75.	0.084	0.089	0.012	0.038	0.050	0.824	2.12	******	******	******	******
1145	90.	0.094	0.094	0.013	0.028	0.041	0.800	2.13	0.013	******	0.0050	0.0270
1200	105.	0.096	0.095	0.012	0.023	0.035	0.792	2.16	******	******	******	******
1215	120.	0.096	0.091	0.012	0.019	0.031	0.776	2.15	0.015	0.024	0.0060	0.0270
1230	135.	0.092	0.087	0.011	0.016	0.028	0.768	2.17	******	******	******	******
1245	150.	0.092	0.086	0.011	0.014	0.026	0.754	2.19	0.015	******	0.0060	0.0270
1300	165.	0.088	0.081	0.011	0.014	0.025	0.744	2.19	******	******	******	******
1315	180.	0.088	0.078	0.012	0.013	0.024	0.740	2.19	0.013	0.035	0.0020	0.0290
1330	195.	0.086	0.076	0.011	0.013	0.025	0.728	2.20	******	******	******	******
1345	210.	0.086	0.075	0.011	0.013	0.024	0.720	2.21	0.011	******	0.0060	0.0290
1400	225.	0.082	0.072	0.012	0.013	0.025	0.704	2.23	******	******	******	******
1415	240.	0.082	0.072	0.011	0.013	0.025	0.696	2.26	0.010	0.042	0.0090	0.0290
1430	255.	0.080	0.069	0.011	0.013	0.024	0.688	2.27	******	******	******	******
1445	270.	0.080	0.069	0.011	0.013	0.024	0.680	2.25	0.008	******	0.0090	0.0290
1500	285.	0.080	0.067	0.011	0.013	0.024	0.672	2.31	******	******	******	******
1515	300.	0.080	0.066	0.011	0.013	0.024	0.664	2.29	0.007	0.052	0.0100	0.0300
1530	315.	0.078	0.066	0.011	0.013	0.024	0.660	2.33	******	******	******	******
1545	330.	0.080	0.064	0.011	0.013	0.024	0.656	2.34	0.006	******	0.0100	0.0320
1600	345.	0.084	0.062	0.011	0.014	0.024	0.652	2.33	******	0.056	******	******
1615	360.	0.080	0.061	0.011	0.014	0.024	0.648	2.36	0.004	******	0.0100	0.0340

EC - 79
TOLUENE
1975 MAY 29

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADICM MW/CM2	PD #2 VOLTS	HCHO VOL L
1015	0.	50.5	18.70	0.135	0.459	30.00
1030	15.	50.5	18.60	0.133	0.435	******
1045	30.	50.5	******	******	0.432	******
1100	45.	50.0	******	******	0.440	******
1115	60.	49.5	19.70	0.138	0.440	30.00
1130	75.	48.5	******	******	0.440	******
1145	90.	48.0	******	******	0.440	******
1200	105.	47.0	******	******	0.442	******
1215	120.	46.5	20.00	0.141	0.442	30.00
1230	135.	45.5	******	******	0.445	******
1245	150.	45.0	******	******	0.437	******
1300	165.	44.5	******	******	0.435	******
1315	180.	44.0	19.60	0.138	0.437	30.00
1330	195.	43.5	******	******	0.435	******
1345	210.	43.0	******	******	0.432	******
1400	225.	42.5	******	******	0.445	******
1415	240.	42.5	20.10	0.140	0.440	30.00
1430	255.	41.5	******	******	0.440	******
1445	270.	41.0	******	******	0.445	******
1500	285.	40.5	******	******	0.440	******
1515	300.	40.0	20.10	0.140	0.440	30.00
1530	315.	40.0	******	******	0.440	******
1545	330.	39.5	******	******	0.440	******
1600	345.	39.0	******	******	0.442	30.00
1615	360.	39.0	19.90	0.140	0.440	******

EC - 80
TOLUENE
1975 JUN 2

BEGIN IRRADIATION 1100; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH DASIBI 1070 (DASIBI) AND MONITOR LABS (MONITOR)
INSTRUMENTS. DASIBI 1212 ALSO ON CHAMBER
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 DEG F RUNS
CO FACTOR 2.84/1.3736; BECKMAN 6800 USED
PAN CALIB 9 (X1.05)

T=0 AT 1100 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	47.95
SSPOWER	KW	AVERAGE	20.18
RADIOM	MW/CM2	AVERAGE	0.140
NO	PPM	INIT COND	0.401
NO2-CORR	PPM	INIT COND	0.095
CO	PPM	INIT COND	2.234
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003
TOLUENE	PPM	INIT COND	1.020

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.810 L/MIN

56 GC SAMPLES TAKEN

EC - 80
TOLUENE
1975 JUN 2

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM DASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM
1100	0.	******	0.000	0.401	0.095	0.498	1.020	2.23	0.000	0.0	0.0010	0.0030
1115	15.	******	0.001	0.370	0.122	0.493	0.984	2.26	******	******	******	******
1130	30.	0.010	0.002	0.326	0.157	0.483	0.960	2.25	0.000	******	0.0040	0.0090
1145	45.	0.010	0.004	0.271	0.197	0.469	0.944	2.26	******	******	******	******
1200	60.	0.016	0.007	0.210	0.241	0.452	0.904	2.27	0.002	0.019	0.0040	0.0110
1215	75.	0.021	0.009	0.154	0.273	0.425	0.864	2.27	******	******	******	******
1230	90.	0.039	0.018	0.100	0.301	0.403	0.840	2.29	0.005	******	******	******
1245	105.	0.055	0.038	0.060	0.312	0.372	0.800	2.32	******	******	******	******
1300	120.	0.078	0.062	0.039	0.298	0.336	0.768	2.33	0.011	0.035	0.0060	0.0270
1315	135.	0.106	0.088	0.028	0.273	0.302	0.744	2.37	******	******	******	******
1330	150.	0.137	0.116	0.021	0.241	0.259	0.712	2.41	0.020	******	0.0080	0.0390
1345	165.	0.168	0.149	0.016	0.201	0.220	0.680	2.43	******	******	******	******
1400	180.	0.188	0.170	0.016	0.171	0.186	0.660	2.43	0.028	0.048	0.0100	0.0620
1415	195.	0.215	0.195	0.012	0.142	0.155	0.624	2.46	******	******	******	******
1430	210.	0.238	0.218	0.012	0.116	0.128	0.608	2.47	0.036	******	0.0110	0.0690
1445	225.	0.258	0.235	0.012	0.093	0.104	0.580	2.50	******	******	******	******
1500	240.	0.266	0.243	0.010	0.075	0.086	0.560	2.51	0.043	0.062	0.0110	0.0690
1515	255.	0.272	0.249	0.010	0.059	0.069	0.530	2.54	******	******	******	******
1530	270.	0.270	0.247	0.010	0.048	0.057	0.520	2.54	0.046	******	0.0130	0.0750
1545	285.	0.268	0.242	0.010	0.041	0.050	0.504	2.61	******	******	******	******
1600	300.	0.258	0.239	0.010	0.032	0.043	0.496	2.59	0.047	0.062	0.0130	0.0790
1615	315.	0.252	0.230	0.009	0.030	0.040	0.488	2.61	******	******	******	******
1630	330.	0.244	0.223	0.010	0.029	0.039	0.472	2.63	0.042	******	0.0130	0.0690
1645	345.	0.238	0.218	0.010	0.030	0.038	0.464	2.65	******	0.078	******	******
1700	360.	0.234	0.211	0.009	0.029	0.037	0.456	2.66	0.036	******	0.0140	0.0690

EC - 80
TOLUENE
1975 JUN 2

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADIOM MW/CM2	PD #2 VOLTS	HCHO VOL L
1100	0.	54.0	18.90	0.130	0.474	30.00
1115	15.	54.0	******	******	0.442	******
1130	30.	53.0	******	******	0.437	******
1145	45.	52.5	******	******	0.435	******
1200	60.	52.0	19.90	0.138	0.442	30.00
1215	75.	51.5	******	******	0.440	******
1230	90.	50.5	******	******	0.435	******
1245	105.	50.0	******	******	0.440	******
1300	120.	49.5	******	******	0.442	30.00
1315	135.	49.0	******	******	0.440	******
1330	150.	48.5	******	******	0.442	******
1345	165.	47.5	******	******	0.440	******
1400	180.	47.0	20.40	0.140	0.440	30.00
1415	195.	46.5	******	******	0.440	******
1430	210.	46.5	******	******	0.440	******
1445	225.	46.0	******	******	0.437	******
1500	240.	46.0	20.60	0.142	0.442	30.00
1515	255.	45.5	******	******	0.440	******
1530	270.	45.5	******	******	0.442	******
1545	285.	45.0	******	******	0.445	******
1600	300.	44.5	20.80	0.144	0.442	30.00
1615	315.	44.0	******	******	0.437	******
1630	330.	44.0	******	******	0.440	******
1645	345.	43.5	******	******	0.442	30.00
1700	360.	43.5	20.50	0.144	0.442	******

EC - 81
TOLUENE
1975 JUN 4

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH DASIBI 1070 AND MONITOR LABS INSTRUMENTS
H2O2 SAMPLES TAKEN (60 L) AT 1545 TO 1615 HOURS
TELETYPE OFF-LINE FROM 1502 TO 1622 HOURS
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 DEG F RUNS
CO FACTOR 2.84/1.335; BECKMAN 6800 USED
PAN CALIB 9 (X1.05)

T=0 AT 1015 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	44.31
SSPOWER	KW	AVERAGE	20.56
RADIOM	MW/CM2	AVERAGE	0.147
NO	PPM	INIT COND	0.408
CO	PPM	INIT COND	2.031
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.005
TOLUENE	PPM	INIT COND	1.960

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.518 L/MIN

60 GC SAMPLES TAKEN

EC - 81
TOLUENE
1975 JUN 4

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM CASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM
1015	0.	0.0	0.000	0.408	******	******	1.960	2.03	0.000	0.0	0.0020	0.0050
1030	15.	0.002	0.000	0.368	0.094	0.503	1.920	2.04	******	******	******	******
1045	30.	0.008	0.002	0.302	0.092	0.500	1.860	2.03	0.001	******	0.0030	0.0060
1100	45.	0.010	0.006	0.214	0.094	0.502	1.800	2.03	******	******	******	******
1115	60.	0.021	0.013	0.122	0.102	0.499	1.760	2.08	0.004	0.0	0.0040	0.0120
1130	75.	0.051	0.038	0.054	0.113	0.498	1.680	2.12	******	******	******	******
1145	90.	0.102	0.087	0.032	0.123	0.495	1.630	2.14	0.016	******	0.0050	0.0250
1200	105.	0.166	0.143	0.022	0.140	0.490	1.570	2.16	******	******	******	******
1215	120.	0.219	0.191	0.016	0.163	0.490	1.500	2.20	0.031	0.027	0.0070	******
1230	135.	0.262	0.231	0.012	0.183	0.484	1.440	2.21	******	******	******	******
1245	150.	0.291	0.253	0.011	0.198	0.476	1.400	2.27	0.045	******	0.0080	0.0560
1300	165.	0.307	0.265	0.011	0.230	0.473	1.330	2.31	******	******	******	******
1315	180.	0.313	0.265	0.010	0.253	0.466	1.320	2.35	0.054	0.047	0.0100	0.0610
1330	195.	0.307	0.258	0.009	0.263	0.452	1.290	2.38	******	******	******	******
1345	210.	0.301	0.248	0.009	0.288	0.444	1.250	1.92	0.060	******	0.0120	0.0630
1400	225.	0.293	0.239	0.010	0.316	0.440	1.240	2.37	******	******	******	******
1415	240.	0.285	0.231	0.010	0.323	0.425	1.220	2.45	0.052	0.076	0.0120	0.0590
1430	255.	0.277	0.225	0.009	0.333	0.408	1.180	2.48	******	******	******	******
1445	270.	0.270	0.215	0.010	0.342	0.399	1.160	2.49	0.046	******	0.0130	0.0530
1500	285.	0.260	0.209	0.010	0.337	0.382	1.160	2.57	******	******	******	******
1515	300.	0.252	0.199	0.010	0.324	0.365	1.140	2.60	0.043	0.081	0.0130	0.0450
1530	315.	0.250	0.193	0.010	0.314	0.346	1.120	2.59	******	******	******	******
1545	330.	0.246	0.192	0.010	0.304	0.331	1.110	2.64	0.035	******	0.0150	0.0570
1600	345.	0.238	0.185	0.010	0.284	0.310	1.110	2.62	******	******	******	******
1615	360.	0.231	0.180	0.009	0.262	0.284	1.090	2.67	0.032	******	0.0170	0.0540

EC - 81
TOLUENE
1975 JUN 4

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADIGH MW/CM2	PD #2 VOLTS	HCHO VOL L
1015	0.	48.5	19.60	******	0.464	30.00
1030	15.	48.0	******	******	0.452	******
1045	30.	48.0	20.70	0.151	0.454	******
1100	45.	47.5	******	******	0.452	******
1115	60.	47.0	20.80	0.148	0.452	30.00
1130	75.	46.5	20.60	0.148	0.449	******
1145	90.	46.0	******	******	0.449	******
1200	105.	45.5	******	******	0.447	******
1215	120.	45.0	20.70	0.147	0.447	30.00
1230	135.	44.5	******	******	0.442	******
1245	150.	44.5	******	******	0.442	******
1300	165.	44.5	******	******	0.440	******
1315	180.	44.0	20.80	0.146	0.445	30.00
1330	195.	44.0	******	******	0.442	******
1345	210.	44.0	******	******	0.440	******
1400	225.	43.5	******	******	0.440	******
1415	240.	43.5	******	******	0.442	30.00
1430	255.	43.0	******	******	0.440	******
1445	270.	43.0	******	******	0.442	******
1500	285.	43.0	******	******	0.437	******
1515	300.	42.5	20.50	0.144	0.435	30.00
1530	315.	41.5	******	******	0.437	******
1545	330.	41.5	******	0.148	0.440	******
1600	345.	41.0	******	******	0.440	******
1615	360.	41.0	******	0.146	0.442	******

EC - 82
TOLUENE
1975 JUN 5

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH CASIBI 1070 AND MONITOR LABS INSTRUMENTS
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 457 & RUSS
CO FACTOR 2.84/1.271; BECKMAN 6800 USED
PAN CALIB 9 (X1.05)

T=0 AT 945 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	41.68
SSPOWER	KW	AVERAGE	20.12
RADICM	MW/CM2	AVERAGE	0.141
NO	PPM	INIT COND	0.679
NO2-CORR	PPM	INIT COND	0.337
CO	PPM	INIT COND	2.134
HCHO	PPM	INIT COND	0.001
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.006
TOLUENE	PPM	INIT COND	1.680

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.267 L/MIN

59 GC SAMPLES TAKEN

EC - 82
TOLUENE
1975 JUN 5

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM DASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM
945	0.	0.0	0.000	0.679	0.337	1.016	1.880	2.13	0.000	0.001	0.0020	0.0060
1000	15.	0.0	0.002	0.660	0.344	1.004	1.840	2.08	******	******	******	******
1015	30.	0.0	0.002	0.630	0.371	0.994	1.820	2.08	0.000	******	0.0030	0.0070
1030	45.	0.004	0.002	0.581	0.392	0.976	1.790	2.12	******	******	******	******
1045	60.	0.006	0.002	0.532	0.424	0.954	1.750	2.12	0.002	0.012	0.0040	0.0090
1100	75.	0.008	0.003	0.474	0.457	0.929	1.700	2.12	******	******	******	******
1115	90.	0.012	0.005	0.418	0.486	0.901	1.660	2.14	0.003	******	0.0050	0.0110
1130	105.	0.018	0.007	0.362	0.517	0.876	1.610	2.18	******	******	******	******
1145	120.	0.021	0.009	0.308	0.538	0.846	1.560	2.23	0.004	0.027	0.0050	0.0120
1200	135.	0.027	0.013	0.249	0.566	0.817	1.520	2.23	******	******	******	******
1215	150.	0.033	0.019	0.191	0.591	0.782	1.480	2.24	0.007	******	0.0070	0.0140
1230	165.	0.045	0.028	0.147	0.604	0.753	1.450	2.29	******	******	******	******
1245	180.	0.059	0.037	0.107	0.607	0.712	1.430	2.28	0.011	0.054	0.0070	******
1300	195.	0.072	0.052	0.078	0.594	0.670	******	2.31	******	******	******	******
1315	210.	0.096	0.076	0.064	0.552	0.616	1.360	2.35	0.017	******	0.0080	0.0290
1330	225.	0.119	0.092	0.049	0.524	0.570	1.320	2.41	******	******	******	******
1345	240.	0.147	0.124	0.037	0.483	0.515	1.280	2.42	0.025	0.081	0.0090	0.0370
1400	255.	0.168	0.142	0.024	0.443	0.467	1.250	2.43	******	******	******	******
1415	270.	0.203	0.175	0.022	0.395	0.412	1.200	2.49	0.032	******	0.0090	0.0450
1430	285.	0.234	0.211	0.020	0.348	0.367	1.160	2.54	******	******	******	******
1445	300.	0.270	0.243	0.015	0.301	0.313	1.140	2.58	0.044	0.081	0.0110	******
1500	315.	0.299	0.276	0.015	0.254	0.267	1.120	2.60	******	******	******	******
1515	330.	0.328	0.306	0.012	0.208	0.218	1.080	2.63	0.053	******	0.0120	0.0610
1530	345.	0.354	0.332	0.012	0.174	0.186	1.030	2.69	******	0.090	******	******
1545	360.	0.365	0.345	0.012	0.141	0.151	0.992	2.74	0.059	******	0.0120	0.0720

EC - 82
TOLUENE
1975 JUN 5

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADICM MW/CM2	PD #2 VOLTS	HCHO VOL L
945	0.	48.0	19.40	0.137	******	30.00
1000	15.	48.5	******	0.140	0.440	******
1015	30.	49.0	19.90	0.138	0.435	******
1030	45.	49.0	19.90	0.144	0.442	******
1045	60.	48.5	20.50	0.147	0.447	30.00
1100	75.	47.5	******	0.143	0.440	******
1115	90.	47.0	20.40	0.145	0.440	******
1130	105.	46.5	20.20	0.140	0.437	******
1145	120.	45.5	19.80	0.137	0.430	30.00
1200	135.	45.0	******	******	0.432	******
1215	150.	44.5	20.10	0.137	0.430	******
1230	165.	44.0	19.90	0.139	0.430	******
1245	180.	43.5	20.40	0.144	0.435	30.00
1300	195.	43.0	******	******	0.437	******
1315	210.	43.0	20.40	0.141	0.432	******
1330	225.	42.5	******	******	0.432	******
1345	240.	41.5	20.40	0.138	0.427	30.00
1400	255.	41.5	******	******	0.432	******
1415	270.	41.0	20.50	0.143	0.432	******
1430	285.	40.5	******	******	0.435	******
1445	300.	40.5	20.10	0.140	0.432	30.00
1500	315.	40.0	******	******	0.427	******
1515	330.	39.5	20.10	0.140	0.430	******
1530	345.	39.5	******	******	0.427	30.00
1545	360.	39.0	19.90	0.139	0.427	******

EC - 83
TOLUENE
1975 JUN 23

BEGIN IRRADIATION 1130; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH CASIBI 1070 AND MONITOR LABS INSTRUMENTS
BENZALDEHYDE ANALYSIS UNCERTAIN BECAUSE OF LARGE INTERFERING BACKGROUND PEAK
BENZALDEHYDE MONITORED USING 3' 10% C-600/C22 COLUMN
RELATIVE HUMIDITY APPROX. 0%
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 DEG F RUNS
PHOTODIODE AT 1730 IS 1725 VALUE
SAMPLE 1715-1730 AT 3 L/MIN; 1625-1724 AT 1.2 L/MIN
CO FACTOR 2.84/1.214; BECKMAN 6800 USED

T=0 AT 1130 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

SSPOWER	KW	AVERAGE	20.37
RADION	MW/CM2	AVERAGE	0.139
NO	PPM	INIT COND	1.363
NO2-CORR	PPM	INIT COND	0.664
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003
BZALD	PPM	INIT COND	0.016
TOLUENE	PPM	INIT COND	5.630

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.404 L/MIN

57 GC SAMPLES TAKEN

EC - 83
TOLUENE
1975 JUN 23

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM DASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM	BZALD PPM
1130	0.	0.0	0.000	1.363	0.664	2.017	5.630	******	0.000	0.0	0.0010	0.0030	0.010
1145	15.	0.000	0.000	1.334	0.674	2.003	5.630	0.22	******	******	******	******	******
1200	30.	0.000	0.000	1.304	0.693	1.993	5.630	0.21	0.000	******	0.0010	0.0050	0.022
1215	45.	0.000	0.001	1.260	0.717	1.977	5.600	0.23	******	******	******	******	******
1230	60.	0.006	0.001	1.216	0.736	1.952	5.570	0.27	0.002	0.0	0.0010	0.0070	0.025
1245	75.	0.006	0.001	1.158	0.779	1.937	5.440	0.27	******	******	******	******	******
1300	90.	0.010	0.001	1.094	0.818	1.908	5.440	0.33	0.002	******	0.0020	0.0070	0.040
1315	105.	0.018	0.001	1.016	0.862	1.888	5.310	0.27	******	******	******	******	******
1330	120.	0.022	0.002	0.928	0.930	1.858	5.250	0.43	0.003	0.007	0.0010	0.0070	0.036
1345	135.	0.027	0.004	0.845	0.988	1.828	5.060	0.42	******	******	******	******	******
1400	150.	0.029	0.004	0.762	1.031	1.793	5.020	0.45	0.005	******	0.0020	0.0090	0.060
1415	165.	0.037	0.005	0.674	1.096	1.768	4.960	0.51	******	******	******	******	******
1430	180.	0.041	0.006	0.576	1.151	1.733	4.860	0.51	0.007	0.038	******	******	0.060
1445	195.	0.053	0.008	0.479	1.218	1.692	4.740	0.59	******	******	******	******	******
1500	210.	0.055	0.013	0.380	1.270	1.661	4.610	0.59	0.010	******	0.0030	0.0110	0.056
1515	225.	0.066	0.019	0.303	1.322	1.624	4.540	0.61	******	******	******	******	******
1530	240.	0.076	0.025	0.225	1.349	1.579	4.480	0.69	0.014	0.060	0.0040	0.0130	0.062
1545	255.	0.088	0.035	0.161	1.367	1.523	4.350	0.70	******	******	******	******	******
1600	270.	0.111	0.059	0.107	1.370	1.473	4.290	0.75	0.027	******	0.0040	0.0160	0.066
1615	285.	0.143	0.081	0.073	1.339	1.412	4.160	0.80	******	******	******	******	******
1630	300.	0.182	0.125	0.049	1.293	1.347	4.130	0.86	0.041	******	0.0050	0.0200	0.072
1645	315.	0.233	0.167	0.029	1.249	1.279	4.030	0.95	******	******	******	******	******
1700	330.	0.295	0.228	0.029	1.186	1.211	3.970	1.01	0.050	******	0.0060	0.0240	0.083
1715	345.	0.362	0.289	0.024	1.120	1.140	3.840	1.11	******	******	******	******	******
1730	360.	0.418	0.351	0.015	1.059	1.078	3.680	1.18	0.065	******	0.0060	0.0280	0.082

EC - 83
TOLUENE
1975 JUN 23

CLOCK TIME	ELAPSED T(MIN)	SSPOWER KW	RADIOM MW/CM2	PD #2 VOLTS	HCHO VOL L
1130	0.	20.20	0.136	0.452	25.00
1145	15.	20.30	0.137	0.432	******
1200	30.	******	******	0.427	******
1215	45.	******	******	0.427	******
1230	60.	******	******	0.425	30.00
1245	75.	******	******	0.423	******
1300	90.	******	******	0.425	******
1315	105.	******	******	0.430	******
1330	120.	20.20	0.138	0.430	30.00
1345	135.	******	******	0.427	******
1400	150.	******	******	0.425	******
1415	165.	******	******	0.423	******
1430	180.	******	******	0.427	30.00
1445	195.	******	******	0.427	******
1500	210.	******	******	0.427	******
1515	225.	******	******	0.427	******
1530	240.	******	******	0.425	30.00
1545	255.	******	******	0.432	******
1600	270.	******	******	0.432	******
1615	285.	******	******	0.430	******
1630	300.	******	******	0.430	******
1645	315.	******	******	0.435	******
1700	330.	******	******	0.437	******
1715	345.	20.80	0.144	0.432	******
1730	360.	******	******	0.432	******

EC - 84
TOLUENE
1975 JUN 25

BEGIN IRRADIATION 1045; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH CASIBI 1070 AND MONITOR LABS INSTRUMENTS
BENZALDEHYDE ANALYSIS UNCERTAIN BECAUSE OF LARGE INTERFERING BACKGROUND PEAK
BENZALDEHYDE MONITORED USING 3' 10% C-600/C22 COLUMN
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 DEG F RUNS
CO FACTOR 2.84/1.214; BECKMAN 6800 USED

T=0 AT 1045 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	74.91
SSPOWER	KW	AVERAGE	19.84
RADIUM	MW/CM2	AVERAGE	0.137
NO	PPM	INIT COND	0.388
NO2-CORR	PPM	INIT COND	0.080
HCHO	PPM	INIT COND	0.007
ACETALD	PPM	INIT COND	0.005
BZALD	PPM	INIT COND	0.032
TOLUENE	PPM	INIT COND	0.968

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.459 L/MIN

57 GC SAMPLES TAKEN

EC - 84
TOLUENE
1975 JUN 25

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM CASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM	BZALD PPM
1045	0.	0.000	0.000	0.388	0.080	0.469	0.968	******	0.000	0.007	0.0050	******	0.032
1100	15.	0.000	0.002	0.371	0.097	0.463	0.944	2.04	******	******	******	******	******
1115	30.	0.000	0.002	0.344	0.119	0.460	0.944	2.05	0.001	******	0.0040	0.0140	0.040
1130	45.	0.002	0.002	0.310	0.143	0.450	0.920	2.07	******	******	******	******	******
1145	60.	0.006	0.004	0.271	0.169	0.440	0.880	2.09	0.002	0.016	0.0060	0.0160	0.022
1200	75.	0.006	0.006	0.234	0.195	0.430	0.872	2.07	******	******	******	******	******
1215	90.	0.008	0.009	0.195	0.222	0.415	0.832	2.08	0.003	******	0.0080	0.0210	0.026
1230	105.	0.016	0.013	0.149	0.250	0.399	0.808	2.06	******	******	******	******	******
1245	120.	0.022	0.019	0.110	0.263	0.381	0.784	2.12	0.005	0.034	0.0060	0.0170	0.025
1300	135.	0.029	0.023	0.088	0.273	0.359	0.760	2.11	******	******	******	******	******
1315	150.	0.041	0.034	0.066	0.273	0.337	0.740	2.13	0.010	******	0.0070	0.0220	0.022
1330	165.	0.053	0.045	0.049	0.261	0.312	0.720	2.16	******	******	******	******	******
1345	180.	0.068	0.066	0.039	0.251	0.290	0.696	2.17	0.015	0.040	0.0060	0.0260	0.020
1400	195.	0.082	0.078	0.029	0.239	0.266	0.672	2.15	******	******	******	******	******
1415	210.	0.102	0.095	0.027	0.218	0.245	0.656	2.21	0.019	******	0.0080	0.0270	0.025
1430	225.	0.113	0.108	0.022	0.200	0.222	0.640	2.21	******	******	******	******	******
1445	240.	0.129	0.126	0.020	0.177	0.196	0.608	2.20	0.026	0.047	0.0080	******	0.022
1500	255.	0.147	0.140	0.020	0.160	0.180	0.600	2.26	******	******	******	******	******
1515	270.	0.162	0.155	0.017	0.141	0.156	0.576	2.27	0.030	******	0.0090	0.0340	0.026
1530	285.	0.174	0.172	0.012	0.127	0.139	0.552	2.28	******	******	******	******	******
1545	300.	0.190	0.186	0.012	0.110	0.122	0.528	2.32	0.034	0.054	0.0090	0.0340	0.016
1600	315.	0.201	0.200	0.012	0.094	0.109	0.520	2.29	******	******	******	******	******
1615	330.	0.215	0.217	0.012	0.079	0.088	0.496	2.35	0.041	******	0.0110	0.0400	0.010
1630	345.	0.227	0.228	0.010	0.068	0.075	0.480	2.37	******	******	******	******	******
1645	360.	0.233	0.235	0.010	0.058	0.067	0.460	2.40	0.043	******	0.0100	0.0400	0.015

EC - 84
TOLUENE
1975 JUN 25

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADIOM MW/CM2	PD #2 VOLTS	HCHO VOL L
1045	0.	92.5	19.50	0.135	0.296	30.00
1100	15.	92.0	******	******	0.427	******
1115	30.	87.5	******	******	0.430	******
1130	45.	85.0	******	******	0.430	******
1145	60.	84.0	20.00	0.137	0.427	30.00
1200	75.	83.5	******	******	0.430	******
1215	90.	83.0	******	******	0.425	******
1230	105.	82.5	******	******	0.432	******
1245	120.	82.0	19.80	0.136	0.427	30.00
1300	135.	80.5	******	******	0.430	******
1315	150.	79.5	******	******	0.425	******
1330	165.	79.0	19.70	0.137	0.427	******
1345	180.	78.0	******	******	0.425	30.00
1400	195.	77.5	******	******	0.427	******
1415	210.	75.5	******	******	0.423	******
1430	225.	75.5	******	******	0.425	******
1445	240.	74.5	******	******	0.425	30.00
1500	255.	73.0	******	******	0.425	******
1515	270.	72.0	******	******	0.425	******
1530	285.	68.5	******	******	0.423	******
1545	300.	64.5	******	******	0.423	30.00
1600	315.	60.5	******	******	0.435	******
1615	330.	57.0	******	******	0.425	******
1630	345.	54.0	******	******	0.423	******
1645	360.	51.5	20.20	0.138	0.423	******

EC - 85
TOLUENE
1975 JUN 26

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER
OZONE MONITORED WITH DASIBI 1070 AND MONITOR LABS INSTRUMENTS
BENZALDEHYDE ANALYSIS UNCERTAIN BECAUSE OF LARGE INTERFERING BACKGROUND PEAK
BENZALDEHYDE MONITORED USING 3' 10% C-600/C22 COLUMN
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 DEG F RUNS
CO FACTOR 2.84/1.185; BECKMAN 6800 USED

T=0 AT 1000 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	40.90
SSPOWER	KW	AVERAGE	20.20
RADIOM	MW/CM2	AVERAGE	0.138
NO	PPM	INIT COND	0.431
NO2-CORR	PPM	INIT COND	0.092
CO	PPM	INIT COND	2.067
ACETALD	PPM	INIT COND	0.004
ACETONE	PPM	INIT COND	0.010
BZALD	PPM	INIT COND	0.005
TOLUENE	PPM	INIT COND	1.920

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.266 L/MIN

57 GC SAMPLES TAKEN

EC - 85
TOLUENE
1975 JUN 26

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM DASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM	BZALD PPM
1000	0.	0.000	0.000	0.431	0.092	0.522	1.920	2.07	0.000	0.0	0.0040	0.0100	0.005
1015	15.	0.000	0.001	0.410	0.108	0.520	1.910	2.10	******	******	******	******	******
1030	30.	0.000	0.001	0.379	0.136	0.515	1.900	2.09	0.000	******	0.0050	******	0.007
1045	45.	0.002	0.002	0.331	0.176	0.508	1.860	2.11	******	******	******	******	******
1100	60.	0.006	0.004	0.280	0.217	0.494	1.790	2.14	0.002	0.006	0.0030	0.0090	0.007
1115	75.	0.010	0.006	0.217	0.260	0.476	1.770	2.15	******	******	******	******	******
1130	90.	0.014	0.009	0.140	0.316	0.456	1.700	2.15	0.004	******	0.0050	0.0100	0.010
1145	105.	0.022	0.020	0.081	0.347	0.428	1.640	2.18	******	******	******	******	******
1200	120.	0.045	0.044	0.039	0.348	0.388	1.610	2.20	0.020	0.016	0.0060	0.0170	0.018
1215	135.	0.086	0.081	0.026	0.322	0.347	1.560	2.24	******	******	******	******	******
1230	150.	0.125	0.123	0.017	0.274	0.291	1.510	2.29	0.030	******	0.0070	0.0220	0.018
1245	165.	0.162	0.164	0.015	0.231	0.246	1.450	2.31	******	******	******	******	******
1300	180.	0.201	0.207	0.013	0.193	0.205	1.390	2.35	0.030	0.034	0.0070	0.0270	0.020
1315	195.	0.242	0.241	0.011	0.153	0.165	1.340	2.37	******	******	******	******	******
1330	210.	0.274	0.267	0.011	0.120	0.130	1.310	2.43	0.041	******	0.0080	0.0340	0.023
1345	225.	0.291	0.283	0.010	0.093	0.102	1.280	2.45	******	******	******	******	******
1400	240.	0.293	0.288	0.010	0.072	0.080	1.230	2.51	0.049	0.054	0.0090	0.0340	0.023
1415	255.	0.291	0.285	0.010	0.062	0.068	1.200	2.52	******	******	******	******	******
1430	270.	0.291	0.279	0.010	0.052	0.060	1.160	2.55	0.050	******	0.0110	0.0370	0.020
1445	285.	0.285	0.272	0.010	0.050	0.057	1.150	2.59	******	******	******	******	******
1500	300.	0.278	0.265	0.009	0.049	0.056	1.120	2.61	0.044	0.074	0.0120	0.0360	0.020
1515	315.	0.274	0.258	0.009	0.048	0.055	1.110	2.66	******	******	******	******	******
1530	330.	0.268	0.253	0.009	0.047	0.055	1.090	2.65	0.037	******	0.0120	0.0360	0.020
1545	345.	0.262	0.243	0.009	0.046	0.053	1.060	2.70	******	0.081	******	******	******
1600	360.	0.258	0.239	0.009	0.044	0.052	1.040	2.72	0.032	******	0.0130	0.0350	0.020

EC - 85
TOLUENE
1975 JUN 26

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADIOM MW/CM2	PD #2 VOLTS	HCHO VOL L
1000	0.	45.0	19.80	0.140	******	30.00
1015	15.	44.5	******	******	0.432	******
1030	30.	44.0	******	******	0.427	******
1045	45.	44.0	******	******	0.427	******
1100	60.	44.0	******	******	0.423	30.00
1115	75.	43.5	******	******	0.423	******
1130	90.	43.5	******	******	0.423	******
1145	105.	43.0	******	******	0.423	******
1200	120.	43.0	20.00	0.137	0.425	30.00
1215	135.	42.5	******	******	0.423	******
1230	150.	41.5	******	******	0.423	******
1245	165.	41.5	******	******	0.423	******
1300	180.	41.0	******	******	0.423	30.00
1315	195.	40.5	******	******	0.418	******
1330	210.	40.0	******	******	0.425	******
1345	225.	40.0	******	******	0.427	******
1400	240.	39.5	20.20	0.136	0.420	30.00
1415	255.	39.0	******	******	0.418	******
1430	270.	38.5	******	******	0.415	******
1445	285.	38.0	******	******	0.415	******
1500	300.	38.0	******	******	0.415	30.00
1515	315.	37.5	20.50	0.138	0.423	******
1530	330.	37.0	******	******	0.425	******
1545	345.	36.5	******	******	0.423	30.00
1600	360.	36.5	20.50	0.138	0.427	******

EC - 86
TOLUENE + FORMALDEHYDE
1975 JUL 2

BEGIN IRRADIATION 1230; 0.25 INCH PYREX FILTER
SUPPLEMENTARY NO2 INJECTION AT 1228
OZONE MONITORED WITH CASIBI 1070 AND MCNITOR LABS INSTRUMENTS
BENZALDEHYDE ANALYSIS UNCERTAIN BECAUSE OF LARGE INTERFERING BACKGROUND PEAK
BENZALDEHYDE MCNITORED USING 3' 10% C-600/C22 COLUMN
TEMPERATURE NOT MONITORED; STANDARD PROCEDURE APPLIED FOR 85 DEG F RUNS
CO FACTOR 2.84/1.18; BECKMAN 6800 USED

T=0 AT 1230 PDT

	CALIB8
PAN	9
REL HUM	2
HCHO	1

REL HUM	%	AVERAGE	35.67
SSPOWER	KW	AVERAGE	20.45
RADIOM	MW/CM2	AVERAGE	0.138
NO	PPM	INIT COND	0.407
NO2-CORR	PPM	INIT COND	0.081
HCHO	PPM	INIT COND	0.161
ACETALD	PPM	INIT COND	0.001
TOLUENE	PPM	INIT COND	1.090
CO	PPM	INIT COND	2.134

* ASSIGNED INITIAL CONDITION

K1=0.14 MIN-1

SAMPLING RATE = 2.810 L/MIN

57 GC SAMPLES TAKEN

EC - 86
TOLUENE + FORMALDEHYDE
1975 JUL 2

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM DASIBI	OZONE PPM MONITOR	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	HCHO PPM	CO PPM	PAN PPM	ACETALD PPM	ACETONE PPM	BZALD PPM
1230	0.	******	******	******	******	******	1.090	0.161	******	0.000	0.0010	******	0.0
1245	15.	******	******	******	******	******	1.080	******	******	******	******	******	******
1300	30.	******	******	******	******	******	1.080	******	******	0.000	0.0030	0.0080	0.0
1315	45.	0.002	0.003	0.303	0.181	0.484	1.040	******	2.13	******	******	******	******
1330	60.	0.002	0.004	0.255	0.216	0.473	1.010	0.134	2.14	0.001	0.0030	0.0070	0.002
1345	75.	0.004	0.005	0.200	0.253	0.455	0.992	******	2.13	******	******	******	******
1400	90.	0.006	0.008	0.143	0.295	0.438	0.960	******	2.18	0.003	0.0040	0.0100	0.002
1415	105.	0.016	0.012	0.096	0.322	0.419	0.944	******	2.20	******	******	******	******
1430	120.	0.020	0.024	0.061	0.336	0.398	0.912	0.114	2.22	0.005	0.0050	******	0.010
1445	135.	0.035	0.044	0.038	0.333	0.372	******	******	2.25	******	******	******	******
1500	150.	0.059	0.067	0.028	0.313	0.338	0.848	******	2.29	0.011	******	******	0.010
1515	165.	0.090	0.095	0.023	0.286	0.310	0.832	******	2.33	******	******	******	******
1530	180.	0.115	0.126	0.017	0.261	0.277	0.792	0.110	2.36	0.015	0.0060	0.0200	0.011
1545	195.	0.141	0.152	0.013	0.232	0.247	0.768	******	2.38	******	******	******	******
1600	210.	0.168	0.181	0.011	0.204	0.219	0.756	******	2.38	0.021	0.0100	0.0270	0.011
1615	225.	0.191	0.208	0.011	0.179	0.188	0.720	******	2.42	******	******	******	******
1630	240.	0.219	0.239	0.010	0.154	0.163	0.688	0.109	2.45	0.028	0.0090	0.0260	0.012
1645	255.	0.242	0.264	0.009	0.132	0.139	0.672	******	2.49	******	******	******	******
1700	270.	0.262	0.286	0.009	0.109	0.118	0.640	******	2.50	0.034	0.0100	0.0290	0.02(
1715	285.	0.279	0.303	0.007	0.093	0.100	0.614	******	2.58	******	******	******	******
1730	300.	0.289	0.312	0.007	0.079	0.085	0.600	0.098	2.60	0.037	0.0030	0.0270	0.010
1745	315.	0.293	0.317	0.007	0.066	0.076	0.580	******	2.65	******	******	******	******
1800	330.	0.299	0.318	0.007	0.059	0.065	0.568	******	2.65	0.037	0.0060	0.0320	0.010
1815	345.	0.289	0.307	0.006	0.053	0.059	0.544	0.105	2.70	******	******	******	******
1830	360.	0.285	0.299	0.006	0.049	0.054	0.528	******	2.62	0.035	0.0100	0.0270	0.010

EC - 86
TOLUENE + FORMALDEHYDE
1975 JUL 2

CLOCK TIME	ELAPSED T(MIN)	REL HUM %	SSPOWER KW	RADICM MW/CM2	PD #2 VOLTS	HCHO VOL L
1230	0.	******	20.50	0.140	******	20.00
1245	15.	******	******	******	******	******
1300	30.	******	******	******	******	******
1315	45.	38.0	******	******	0.430	******
1330	60.	38.0	20.30	0.137	0.425	30.00
1345	75.	38.0	******	******	0.423	******
1400	90.	38.0	******	******	0.423	******
1415	105.	37.5	******	******	0.415	******
1430	120.	37.5	20.00	0.135	0.413	30.00
1445	135.	37.0	******	******	0.420	******
1500	150.	36.5	******	******	0.415	******
1515	165.	36.0	******	******	0.418	******
1530	180.	36.0	20.20	0.134	0.418	30.00
1545	195.	35.5	******	******	0.420	******
1600	210.	35.0	******	******	0.418	******
1615	225.	35.0	******	******	0.418	******
1630	240.	34.5	20.10	0.131	0.415	30.00
1645	255.	34.0	******	******	0.430	******
1700	270.	34.0	21.00	0.142	0.430	******
1715	285.	33.5	******	******	0.425	******
1730	300.	33.0	20.70	0.139	0.427	30.00
1745	315.	33.0	******	******	0.427	******
1800	330.	32.5	20.80	0.143	0.430	******
1815	345.	32.5	******	******	0.432	30.00
1830	360.	32.0	******	******	0.430	******

EC - 95
PROPENE
1975 SEP 29

BEGIN IRRADIATION 1115; 0.25 INCH PYREX FILTER
RADIOMETER IN SWITCH POSITION 3
NOX FACTOR 0.9 TO CORRECT TECO RXN CHAMBER FROM 23.0 TO 22.0
CO FACTOR 2.84/1.21; BECKMAN 6800 USED

T=0 AT 1115 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

TS	DEG K	AVERAGE	303.5
REL HUM	%	AVERAGE	60.18
SSPOWER	KW	AVERAGE	11.97
RADIOM	MW/CM2	AVERAGE	0.305
H2O	PPM	AVERAGE	2.599E 04
NO	PPM	INIT COND	0.365
NO2-CORR	PPM	INIT COND	0.092
CO	PPM	INIT COND	2.012
HCHO	PPM	INIT COND	0.010
ACETALD	PPM	INIT COND	0.005
ACETONE	PPM	INIT COND	0.008
PROPENE	PPM	INIT COND	0.504

* ASSIGNED INITIAL CONDITION

K1=0.35 MIN-1

SAMPLING RATE = 1.820 L/MIN

54 GC SAMPLES TAKEN

EC - 95
PROPENE
1975 SEP 29

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	PROX PPM	ME-N PPM
1115	0.	0.0	0.365	0.092	0.456	0.504	2.01	0.000	0.010	0.005	0.0003	0.0080	0.0	0.0
1130	15.	0.0	0.203	0.223	0.437	0.414	2.01	******	******	******	******	******	******	******
1145	30.	0.025	0.104	0.302	0.406	0.340	2.06	0.009	******	******	0.0008	0.0110	0.0002	0.0
1200	45.	0.063	0.055	0.321	0.378	0.290	2.06	******	******	******	******	******	******	******
1215	60.	0.119	0.036	0.315	0.351	0.244	2.10	0.029	0.222	0.141	0.0018	0.0160	0.0004	0.0003
1230	75.	0.156	0.025	0.301	0.328	0.210	2.17	******	******	******	******	******	******	******
1245	90.	0.197	0.021	0.284	0.302	0.170	2.27	0.037	******	0.155	0.0026	0.0210	0.0006	0.0006
1300	105.	0.236	0.016	0.248	0.265	0.140	2.37	******	******	******	******	******	******	******
1315	120.	0.272	0.012	0.216	0.228	0.116	2.40	0.074	0.282	0.165	0.0030	0.0230	******	0.0008
1330	135.	0.301	0.011	0.185	0.193	0.096	2.42	******	******	******	******	******	******	******
1345	150.	0.324	0.009	0.156	0.165	0.074	2.53	0.100	******	0.157	0.0035	0.0260	0.0006	0.0010
1400	165.	0.346	0.009	0.132	0.140	0.064	2.53	******	******	******	******	******	******	******
1415	180.	0.369	0.007	0.109	0.114	0.052	2.64	0.122	0.291	0.139	0.0039	0.0290	0.0005	0.0011
1430	195.	0.391	0.007	0.087	0.092	0.040	2.75	******	******	******	******	******	******	******
1445	210.	0.406	0.005	0.068	0.072	0.031	2.76	0.141	******	0.123	0.0040	0.0320	0.0009	0.0011
1500	225.	0.418	0.004	0.058	0.063	0.025	2.77	******	******	******	******	******	******	******
1515	240.	0.422	0.004	0.046	0.050	0.020	2.79	0.147	******	0.127	0.0047	0.0390	0.0010	0.0011
1530	255.	0.430	0.004	0.039	0.044	0.016	2.92	******	0.250	******	******	******	******	******
1545	270.	0.432	0.004	0.036	0.038	0.013	2.94	******	******	0.108	0.0041	0.0360	0.0012	0.0011
1600	285.	0.430	0.004	0.029	0.032	0.010	2.99	******	******	******	******	******	******	******
1615	300.	0.420	0.004	0.023	0.026	0.009	3.05	0.158	0.228	0.098	0.0040	0.0380	0.0012	0.0011
1630	315.	0.414	0.004	0.020	0.024	0.007	3.03	******	******	******	******	******	******	******
1645	330.	0.410	0.004	0.017	0.019	0.006	3.05	0.158	******	0.075	0.0030	0.0470	0.0012	0.0011
1700	345.	0.408	0.004	0.016	0.019	0.005	3.25	******	0.215	******	******	******	******	******
1715	360.	0.403	0.003	0.018	0.021	0.004	3.18	0.153	******	0.077	0.0039	0.0400	0.0012	0.0011

EC - 95
PROPENE
1975 SEP 29

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1115	0.	87.2	50.0	******	0.351	20.00
1130	15.	89.2	49.5	11.70	0.290	******
1145	30.	87.2	50.5	11.80	0.300	******
1200	45.	87.4	53.0	11.90	0.296	******
1215	60.	86.5	56.5	11.80	0.305	30.00
1230	75.	86.7	60.0	12.00	******	******
1245	90.	86.5	61.5	******	******	******
1300	105.	86.5	63.0	******	******	******
1315	120.	87.0	64.0	******	******	30.00
1330	135.	86.2	64.0	******	******	******
1345	150.	86.0	65.0	******	******	******
1400	165.	86.7	65.5	******	******	******
1415	180.	86.7	65.5	11.80	0.298	30.00
1430	195.	87.0	65.5	******	******	******
1445	210.	87.2	65.0	******	******	******
1500	225.	87.2	64.5	******	******	******
1515	240.	86.7	65.5	******	******	******
1530	255.	87.0	65.0	12.10	0.301	30.00
1545	270.	87.2	64.5	******	******	******
1600	285.	87.0	64.5	******	******	******
1615	300.	87.2	64.5	12.10	0.301	30.00
1630	315.	87.9	64.0	******	******	******
1645	330.	86.7	63.5	12.20	0.305	******
1700	345.	87.2	64.0	******	******	30.00
1715	360.	87.7	63.5	12.30	0.308	******

EC - 96
PROPENE
1975 SEP 30

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER
RADIOMETER IN SWITCH POSITION 2
NOX FACTOR 0.82 TO CORRECT TECO RXN CHAMBER FROM 23.7 TO 22.0
CO FACTOR 2.84/1.21; BECKMAN 6800 USED

T=0 AT 1000 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

TS	DEG K	AVERAGE	303.2
REL HUM	%	AVERAGE	69.49
SSPOWER	KW	AVERAGE	12.00
RADIOM	MW/CM2	AVERAGE	0.342
H2O	PPM	AVERAGE	2.907E 04
NO	PPM	INIT COND	0.349
NO2-CORR	PPM	INIT COND	0.090
HCHO	PPM	INIT COND	0.020
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.004
PROPENE	PPM	INIT COND	0.500

* ASSIGNED INITIAL CONDITION

K1=0.35 MIN-1

SAMPLING RATE = 1.723 L/MIN

54 GC SAMPLES TAKEN

EC - 96
PROPENE
1975 SEP 30

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	PROX PPM	HE-N PPM
1000	0.	0.0	0.349	0.090	0.438	0.500	******	0.000	0.020	0.002	0.0002	0.0040	0.0	******
1015	15.	0.0	0.279	0.151	0.429	0.450	1.93	******	******	******	******	******	******	******
1030	30.	0.002	0.194	0.222	0.415	0.396	1.97	0.002	******	0.053	0.0004	0.0040	0.0002	******
1045	45.	0.016	0.122	0.274	0.396	0.344	2.06	******	******	******	******	******	******	******
1100	60.	0.041	0.071	0.302	0.373	0.306	2.09	0.013	0.161	0.107	0.0011	0.0080	0.0006	******
1115	75.	0.078	0.049	0.301	0.350	0.272	2.17	******	******	******	******	******	******	******
1130	90.	0.117	0.034	0.288	0.322	0.232	2.10	0.029	******	0.123	0.0017	0.0100	0.0008	******
1145	105.	0.158	0.026	0.268	0.295	0.200	2.16	******	******	******	******	******	******	******
1200	120.	0.193	0.021	0.248	0.268	0.170	2.20	0.048	0.211	0.150	0.0022	0.0150	0.0007	******
1215	135.	0.223	0.017	0.224	0.242	0.140	2.22	******	******	******	******	******	******	******
1230	150.	0.254	0.013	0.201	0.214	0.120	2.31	0.067	******	0.157	0.0027	0.0190	0.0010	0.0006
1245	165.	0.281	0.012	0.175	0.187	0.096	2.55	******	******	******	******	******	******	******
1300	180.	0.307	0.010	0.153	0.163	0.080	2.52	0.088	0.262	0.130	0.0027	0.0210	0.0012	0.0006
1315	195.	0.328	0.009	0.125	0.134	0.070	2.44	******	******	******	******	******	******	******
1330	210.	0.350	0.008	0.101	0.109	0.054	2.53	0.110	******	0.122	0.0020	0.0360	******	0.0011
1345	225.	0.371	0.007	0.082	0.089	0.043	2.55	******	******	******	******	******	******	******
1400	240.	0.387	0.006	0.065	0.071	0.034	2.70	0.127	0.222	0.136	0.0036	0.0310	0.0014	0.0011
1415	255.	0.401	0.006	0.046	0.051	0.024	2.69	******	******	******	******	******	******	******
1430	270.	0.410	0.005	0.026	0.030	0.023	2.75	0.149	******	0.109	0.0035	0.0340	0.0013	0.0006
1445	285.	0.420	0.005	0.016	0.021	0.018	2.79	******	******	******	******	******	******	******
1500	300.	0.422	0.005	0.005	0.009	0.014	2.81	0.160	0.220	0.106	0.0037	0.0390	******	0.0011
1515	315.	0.420	0.005	0.0	0.003	0.012	2.87	******	******	******	******	******	******	******
1530	330.	0.422	0.004	0.0	0.0	0.010	2.82	0.167	******	0.097	0.0036	0.0320	0.0015	0.0008
1545	345.	0.416	0.004	0.0	0.0	0.008	2.95	******	0.232	******	******	******	******	******
1600	360.	0.412	0.006	0.0	0.0	0.006	2.94	0.162	******	0.086	0.0035	0.0320	0.0016	0.0011

EC - 96
PROPENE
1975 SEP 30

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1000	0.	87.0	58.5	12.80	0.373	20.00
1015	15.	88.4	57.5	******	******	******
1030	30.	87.0	58.5	******	******	******
1045	45.	87.2	60.5	******	******	******
1100	60.	86.2	63.0	******	******	20.00
1115	75.	85.7	67.0	******	******	******
1130	90.	86.0	68.5	11.60	0.332	******
1145	105.	85.7	70.0	******	******	******
1200	120.	85.2	72.0	11.80	0.334	20.00
1215	135.	85.5	73.0	******	******	******
1230	150.	85.5	73.5	******	******	******
1245	165.	85.5	72.5	******	******	******
1300	180.	85.7	72.5	11.80	0.333	20.00
1315	195.	85.2	73.5	******	******	******
1330	210.	85.2	73.0	******	******	******
1345	225.	85.5	73.5	******	******	******
1400	240.	86.0	73.5	******	******	20.00
1415	255.	86.0	73.0	******	******	******
1430	270.	86.5	72.0	******	******	******
1445	285.	85.5	72.0	******	******	******
1500	300.	85.5	73.0	12.00	0.338	20.00
1515	315.	86.2	72.0	******	******	******
1530	330.	87.0	71.0	******	******	******
1545	345.	86.7	71.0	******	******	20.00
1600	360.	86.0	70.0	12.00	******	******

EC - 97
PROPENE + BUTANE
1975 OCT 1

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER
6-HOUR CONC (PPB): C2-N, 1.6; C3-N1, 1.4; C4-N1, 2.5; (FROM OXYGENATE COLUMN)
OZONE FACTOR 0.8
CO FACTOR 2.84/1.21; BECKMAN 6800 USED

T=0 AT 1030 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	70.58
SSPOWER	KW	AVERAGE	12.22
RADIOM	MW/CM2	AVERAGE	0.337
H2O	PPM	AVERAGE	2.981E 04
NO	PPM	INIT COND	0.397
NO2-CORR	PPM	INIT COND	0.088
PROPENE	PPM	INIT COND	0.500
N-C4	PPM	INIT COND	2.040
CO	PPM	INIT COND	1.820
HCHO	PPM	INIT COND	0.004
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

K1=0.35 MIN-1

SAMPLING RATE = 1.562 L/MIN

54 GC SAMPLES TAKEN

EC - 97
PROPENE + BUTANE
1975 OCT 1

CLOCK TIME	ELAPSED TIMIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1030	0.	85.0	54.0	12.00	0.333	20.00
1045	15.	86.7	54.0	******	******	******
1100	30.	85.5	60.0	******	******	******
1115	45.	85.5	67.5	******	******	******
1130	60.	85.2	71.0	12.10	0.334	20.00
1145	75.	85.5	74.0	******	******	******
1200	90.	85.7	73.5	******	******	******
1215	105.	85.5	72.5	******	******	******
1230	120.	86.0	74.0	******	******	20.00
1245	135.	86.2	74.0	******	******	******
1300	150.	85.5	74.0	******	******	******
1315	165.	85.5	74.5	******	******	******
1330	180.	86.2	74.5	12.30	0.338	20.00
1345	195.	86.5	73.5	******	******	******
1400	210.	87.2	72.5	******	******	******
1415	225.	86.0	72.0	******	******	******
1430	240.	87.0	73.5	12.30	0.338	20.00
1445	255.	86.2	72.0	******	******	******
1500	270.	87.0	71.5	******	******	******
1515	285.	87.0	72.0	******	******	******
1530	300.	87.4	72.0	******	******	20.00
1545	315.	87.9	70.5	******	******	******
1600	330.	86.2	70.5	******	******	******
1615	345.	86.5	72.5	******	******	20.00
1630	360.	87.2	71.0	12.40	0.340	******

EC - 97
PROPENE + BUTANE
1975 OCT 1

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM
1030	0.	0.0	0.397	0.088	0.483	0.500	2.04
1045	15.	0.0	0.319	0.157	0.474	0.476	2.08
1100	30.	0.006	0.216	0.242	0.460	0.422	2.00
1115	45.	0.025	0.118	0.325	0.444	0.380	1.93
1130	60.	0.064	0.067	0.355	0.424	0.342	1.96
1145	75.	0.125	0.044	0.348	0.391	0.300	1.93
1200	90.	0.193	0.031	0.325	0.354	0.260	1.89
1215	105.	0.260	0.023	0.290	0.312	0.230	1.90
1230	120.	0.315	0.020	0.252	0.272	0.180	1.86
1245	135.	0.379	0.017	0.224	0.240	0.148	******
1300	150.	0.420	0.015	0.193	0.207	0.126	1.80
1315	165.	0.465	0.015	0.155	0.168	0.100	1.76
1330	180.	0.502	0.012	0.117	0.129	0.080	1.76
1345	195.	0.533	0.012	0.088	0.099	0.066	1.71
1400	210.	0.555	0.011	0.062	0.073	0.050	1.69
1415	225.	0.571	0.011	0.041	0.052	0.040	******
1430	240.	0.578	0.011	0.024	0.035	0.034	1.68
1445	255.	0.574	0.011	0.018	0.028	0.026	1.64
1500	270.	0.571	0.010	0.015	0.024	0.025	1.62
1515	285.	0.563	0.010	0.007	0.017	0.020	1.62
1530	300.	0.557	0.010	0.000	0.009	0.016	1.60
1545	315.	0.547	0.010	0.002	0.011	0.015	1.60
1600	330.	0.539	0.010	0.003	0.012	0.010	1.56
1615	345.	0.530	0.009	0.002	0.011	******	1.56
1630	360.	0.524	0.009	0.000	0.008	0.010	1.54

EC - 97
PROPENE + BUTANE
1975 OCT 1

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	C2-N PPM	C4-N-2 PPM C-600
1030	0.	1.82	0.000	0.004	0.001	0.0003	0.0020	0.0	0.0	0.0001	0.0	0.0	0.0
1045	15.	1.88	******	******	******	******	******	******	******	******	******	******	******
1100	30.	1.90	0.003	******	0.056	0.0007	0.0050	0.0005	0.0090	0.0001	0.0	0.0	0.0024
1115	45.	2.02	******	******	******	******	******	******	******	******	******	******	******
1130	60.	2.05	0.011	0.121	0.094	0.0014	0.0060	0.0010	0.0170	0.0002	0.0	0.0	0.0047
1145	75.	2.08	******	******	******	******	******	******	******	******	******	******	******
1200	90.	2.10	0.034	******	0.077	0.0032	0.0240	0.0021	0.0350	0.0011	0.0001	0.0001	0.0072
1215	105.	2.15	******	******	******	******	******	******	******	******	******	******	******
1230	120.	2.26	0.070	0.242	0.205	0.0045	0.0350	0.0029	0.0480	0.0016	******	0.0004	0.0094
1245	135.	2.32	******	******	******	******	******	******	******	******	******	******	******
1300	150.	2.30	0.085	******	0.214	0.0055	0.0340	0.0032	0.0540	0.0016	0.0006	0.0006	0.0114
1315	165.	2.43	******	******	******	******	******	******	******	******	******	******	******
1330	180.	2.42	0.117	0.272	0.229	0.0057	0.0400	0.0035	0.0620	0.0018	0.0007	0.0006	0.0134
1345	195.	2.44	******	******	******	******	******	******	******	******	******	******	******
1400	210.	2.47	0.145	******	0.227	0.0064	0.0430	0.0038	0.0720	0.0021	0.0008	0.0006	0.0151
1415	225.	2.59	******	******	******	******	******	******	******	******	******	******	******
1430	240.	2.62	0.162	0.250	0.230	0.0067	0.0460	0.0042	0.0860	0.0022	0.0011	0.0011	0.0166
1445	255.	2.70	******	******	******	******	******	******	******	******	******	******	******
1500	270.	2.78	0.162	******	0.217	0.0067	0.0450	******	0.0800	0.0022	0.0011	0.0011	0.0166
1515	285.	2.80	******	******	******	******	******	******	******	******	******	******	******
1530	300.	2.81	0.171	0.242	0.213	0.0066	0.0440	0.0042	0.0850	0.0022	0.0011	0.0011	0.0170
1545	315.	2.77	******	******	******	******	******	******	******	******	******	******	******
1600	330.	2.92	0.162	******	0.211	0.0067	0.0420	0.0045	0.0870	0.0024	0.0011	0.0011	0.0170
1615	345.	2.98	******	0.224	******	******	******	******	******	******	******	******	******
1630	360.	2.98	0.162	******	0.200	0.0066	0.0420	0.0045	0.0920	0.0024	0.0011	0.0011	0.0170

EC - 97
PROPENE + BUTANE
1975 OCT 1

CLOCK TIME	ELAPSED TIMIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1030	0.	85.0	54.0	12.00	0.333	20.00
1045	15.	86.7	54.0	******	******	******
1100	30.	85.5	60.0	******	******	******
1115	45.	85.5	67.5	******	******	******
1130	60.	85.2	71.0	12.10	0.334	20.00
1145	75.	85.5	74.0	******	******	******
1200	90.	85.7	73.5	******	******	******
1215	105.	85.5	72.5	******	******	******
1230	120.	86.0	74.0	******	******	20.00
1245	135.	86.2	74.0	******	******	******
1300	150.	85.5	74.0	******	******	******
1315	165.	85.5	74.5	******	******	******
1330	180.	86.2	74.5	12.30	0.338	20.00
1345	195.	86.5	73.5	******	******	******
1400	210.	87.2	72.5	******	******	******
1415	225.	86.0	72.0	******	******	******
1430	240.	87.0	73.5	12.30	0.338	20.00
1445	255.	86.2	72.0	******	******	******
1500	270.	87.0	71.5	******	******	******
1515	285.	87.0	72.0	******	******	******
1530	300.	87.4	72.0	******	******	20.00
1545	315.	87.9	70.5	******	******	******
1600	330.	86.2	70.5	******	******	******
1615	345.	86.5	72.5	******	******	20.00
1630	360.	87.2	71.0	12.40	0.340	******

EC - 99
PROPENE + BUTANE
1975 OCT 6

BEGIN IRRADIATION 1030; 0.25 INCH PYREX FILTER
6-HOUR CONC (PPB): C2-N, 1.7; C3-N1, 1.6; C4-N1, 2.3; (FROM OXYGENATE COLUMN)
OZONE FACTOR 0.8
CO FACTOR 2.84/1.22; BECKMAN 6800 USED

T=0 AT 1015 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1

TS	DEG K	AVERAGE	302.9
REL HUM	%	AVERAGE	72.59
SSPOWER	Kw	AVERAGE	12.57
RADIOM	MW/CM2	AVERAGE	0.333
H2O	PPM	AVERAGE	2.991E 04
NO	PPM	INIT COND	0.407
NO2-CORR	PPM	INIT COND	0.090
PROPENE	PPM	INIT COND	0.400
N-C4	PPM	INIT COND	2.000
CO	PPM	INIT COND	2.081
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003
MEK	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

K1=0.35 MIN-1

SAMPLING RATE = 1.562 L/MIN

54 GC SAMPLES TAKEN

EC - 99
PROPENE + BUTANE
1975 OCT 6

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM
1015	0.	0.0	0.407	0.090	0.497	0.400	2.00
1030	15.	0.0	0.325	0.163	0.487	0.368	1.97
1045	30.	0.0	0.221	0.244	0.467	0.324	1.95
1100	45.	0.016	0.128	0.320	0.447	0.294	1.92
1115	60.	0.045	0.078	0.351	0.429	0.270	1.90
1130	75.	0.084	0.053	0.349	0.403	0.234	1.86
1145	90.	0.135	0.039	0.334	0.375	0.206	1.85
1200	105.	0.180	0.031	0.310	0.340	0.176	1.81
1215	120.	0.227	0.026	0.286	0.310	0.150	1.74
1230	135.	0.274	0.020	0.264	0.284	0.130	1.76
1245	150.	0.313	0.017	0.239	0.256	0.120	1.74
1300	165.	0.352	0.016	0.213	0.229	0.098	1.74
1315	180.	0.391	0.015	0.184	0.200	0.080	1.74
1330	195.	0.424	0.012	0.155	0.167	0.066	******
1345	210.	0.453	0.012	0.123	0.136	0.056	1.68
1400	225.	0.481	0.011	0.104	0.115	0.042	1.66
1415	240.	0.510	0.010	0.085	0.095	0.036	1.64
1430	255.	0.528	0.010	0.058	0.068	0.030	1.60
1445	270.	0.545	0.010	0.033	0.042	0.020	1.60
1500	285.	0.551	0.010	0.030	0.039	0.020	1.59
1515	300.	0.557	0.010	0.027	0.035	0.018	1.60
1530	315.	0.551	0.011	0.018	0.028	0.016	1.55
1545	330.	0.551	0.010	0.006	0.015	0.012	1.55
1600	345.	0.547	0.009	0.005	0.014	0.010	1.52
1615	360.	0.539	0.010	0.005	0.013	0.008	1.52

EC - 99
PROPENE + BUTANE
1975 OCT 6

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	C2-N PPM	C4-N-2 PPM C-600
1015	0.	2.08	0.000	******	0.001	0.0003	0.0030	0.0001	0.0010	0.0	0.0	0.0	0.0
1030	15.	1.89	******	******	******	******	******	******	******	******	******	******	******
1045	30.	2.06	******	******	0.047	0.0006	0.0030	0.0008	0.0120	0.0	******	******	0.0027
1100	45.	2.07	******	******	******	******	******	******	******	******	******	******	******
1115	60.	2.11	0.011	0.105	0.104	0.0014	0.0060	0.0013	0.0200	0.0001	0.0	0.0	0.0046
1130	75.	2.07	******	******	******	******	******	******	******	******	******	******	******
1145	90.	2.25	0.026	******	0.127	0.0023	0.0090	0.0019	0.0340	0.0003	0.0	0.0	0.0070
1200	105.	2.29	******	******	******	******	******	******	******	******	******	******	******
1215	120.	2.32	0.055	0.159	0.152	0.0033	0.0130	0.0022	0.0380	******	0.0	0.0	0.0088
1230	135.	2.36	******	******	******	******	******	******	******	******	******	******	******
1245	150.	2.33	0.065	******	0.132	0.0036	0.0150	0.0019	0.0440	******	0.0006	0.0006	0.0109
1300	165.	2.48	******	******	******	******	******	******	******	******	******	******	******
1315	180.	2.42	0.079	0.211	0.176	0.0049	0.0240	0.0032	0.0580	0.0010	0.0006	0.0006	0.0124
1330	195.	2.63	******	******	******	******	******	******	******	******	******	******	******
1345	210.	2.64	0.105	******	0.188	0.0053	0.0220	0.0034	0.0640	0.0010	0.0006	0.0006	0.0141
1400	225.	2.60	******	******	******	******	******	******	******	******	******	******	******
1415	240.	2.72	0.116	******	0.194	0.0057	0.0240	0.0032	0.0720	0.0011	0.0011	0.0006	0.0149
1430	255.	2.80	******	******	******	******	******	******	******	******	******	******	******
1445	270.	2.76	0.143	******	0.175	0.0055	0.0220	0.0036	0.0700	0.0012	0.0017	0.0006	0.0181
1500	285.	2.82	******	******	******	******	******	******	******	******	******	******	******
1515	300.	2.83	0.141	0.218	0.202	0.0062	0.0280	0.0044	0.0910	0.0015	0.0011	0.0008	0.0169
1530	315.	2.91	******	******	******	******	******	******	******	******	******	******	******
1545	330.	2.97	0.158	******	0.174	0.0062	0.0270	0.0040	0.0810	0.0012	0.0008	0.0006	0.0168
1600	345.	3.01	******	******	******	******	******	******	******	******	******	******	******
1615	360.	2.95	0.151	0.201	0.190	0.0067	0.0310	0.0042	0.0990	0.0015	0.0011	0.0008	0.0175

EC - 99
PROPENE + BUTANE
1975 OCT 6

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1015	0.	85.2	54.5	12.30	0.325	20.00
1030	15.	85.2	54.5	******	******	******
1045	30.	84.5	60.0	******	******	******
1100	45.	84.8	69.5	******	******	******
1115	60.	85.0	71.5	12.50	0.332	20.00
1130	75.	85.2	73.0	******	******	******
1145	90.	85.0	73.5	******	******	******
1200	105.	85.2	75.5	******	******	******
1215	120.	85.2	75.5	12.70	0.334	20.00
1230	135.	85.5	76.0	******	******	******
1245	150.	85.5	75.5	******	******	******
1300	165.	85.5	76.0	12.60	0.334	******
1315	180.	85.5	76.5	12.60	0.333	20.00
1330	195.	86.0	76.0	******	******	******
1345	210.	85.7	75.5	******	******	******
1400	225.	85.5	75.0	******	******	******
1415	240.	85.5	75.0	12.50	0.333	20.00
1430	255.	85.5	75.0	******	******	******
1445	270.	85.5	75.0	******	******	******
1500	285.	85.7	74.5	******	******	******
1515	300.	86.0	74.5	******	******	20.00
1530	315.	85.7	73.5	******	******	******
1545	330.	86.0	74.5	******	******	******
1600	345.	86.2	74.0	12.40	0.345	******
1615	360.	86.2	73.5	13.00	0.330	20.00

EC -106
PROPENE + BUTANE
1975 OCT 14

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER
SPECTRAL DISTRIBUTION TAKEN AT 1552
OZONE FACTOR 0.8
CO FACTOR 2.84/1.20; BECKMAN 6800 USED

T=0 AT 945 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	1

TS	DEG K	AVERAGE	302.8
REL HUM	%	AVERAGE	51.90
SSPOWER	KW	AVERAGE	12.67
RADIOM	MW/CM2	AVERAGE	0.331
H2O	PPM	AVERAGE	2.132E 04
NO	PPM	INIT COND	0.401
NO2-CORR	PPM	INIT COND	0.102
PROPENE	PPM	INIT COND	0.402
N-C4	PPM	INIT COND	2.000
CO	PPM	INIT COND	1.815
HCHO	PPM	INIT COND	0.012
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.618
430.	1.557
403.	1.425
380.	1.316
370.	1.236
360.	1.119
350.	1.000
340.	0.789
330.	0.572
320.	0.357
310.	0.146
300.	0.039
290.	0.001
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.5C4 L/MIN

64 GC SAMPLES TAKEN

EC -106
PROPENE + BUTANE
1975 OCT 14

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM
945	0.	0.0	0.401	0.102	0.500	0.402	2.00
1000	15.	0.0	0.349	0.145	0.494	0.380	2.00
1015	30.	0.0	0.288	0.192	0.482	0.352	1.96
1030	45.	0.0	0.228	0.243	0.472	0.325	1.95
1045	60.	0.008	0.169	0.296	0.459	0.304	1.94
1100	75.	0.020	0.121	0.321	0.441	0.290	1.90
1115	90.	0.041	0.085	0.340	0.426	0.262	1.90
1130	105.	0.072	0.061	0.344	0.406	0.240	1.84
1145	120.	0.104	0.049	0.338	0.386	0.222	1.84
1200	135.	0.145	0.039	0.328	0.367	0.200	1.84
1215	150.	0.184	0.031	0.314	0.345	0.170	1.82
1230	165.	0.229	0.024	0.294	0.317	0.150	1.82
1245	180.	0.266	0.021	0.269	0.290	0.136	1.78
1300	195.	0.307	0.018	0.251	0.268	0.112	1.75
1315	210.	0.346	0.016	0.235	0.251	0.094	1.74
1330	225.	0.381	0.015	0.198	0.213	0.080	1.74
1345	240.	0.414	0.012	0.166	0.179	0.076	1.71
1400	255.	0.447	0.012	0.139	0.150	0.060	1.68
1415	270.	0.483	0.011	0.113	0.124	0.042	1.66
1430	285.	0.510	0.011	0.087	0.097	0.038	1.64
1445	300.	0.533	0.010	0.067	0.075	0.028	1.61
1500	315.	0.553	0.010	0.049	0.057	0.026	1.61
1515	330.	0.569	0.009	0.030	0.039	0.018	1.58
1530	345.	0.582	0.010	0.017	0.025	0.016	1.57
1545	360.	0.590	0.010	0.006	0.012	0.014	1.54
1600	375.	0.590	0.009	0.000	0.001	0.012	1.50
1615	390.	0.592	0.007	-0.000	-0.000	0.010	1.43
1630	405.	0.592	0.009	0.000	0.000	0.006	1.50
1645	420.	0.588	0.009	-0.000	-0.000	0.006	1.50
1700	435.	0.576	0.009	0.000	0.000	0.004	1.47

EC -106
PROPENE + BUTANE
1975 OCT 14

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	C2-N PPM	C4-N-2 PPM C-600
945	0.	1.82	0.000	0.012	0.001	0.0002	0.0020	0.0	0.0	0.0	0.0	0.0	0.0
1000	15.	1.77	******	******	******	******	******	******	******	******	******	******	******
1015	30.	1.79	0.001	******	0.032	0.0004	0.0030	0.0004	0.0060	0.0001	0.0	0.0	0.0019
1030	45.	1.76	******	******	******	******	******	******	******	******	******	******	******
1045	60.	1.80	0.004	0.151	0.070	0.0009	0.0040	0.0008	0.0160	0.0004	0.0	0.0	0.0037
1100	75.	1.88	******	******	******	******	******	******	******	******	******	******	******
1115	90.	1.94	0.010	******	0.109	0.0016	0.0060	0.0013	0.0260	0.0008	0.0	0.0	0.0055
1130	105.	1.93	******	******	******	******	******	******	******	******	******	******	******
1145	120.	1.95	0.020	0.191	0.132	0.0024	0.0080	0.0017	0.0330	0.0012	0.0003	0.0003	0.0073
1200	135.	1.91	******	******	******	******	******	******	******	******	******	******	******
1215	150.	2.04	0.030	******	0.149	0.0031	0.0100	0.0020	0.0400	0.0016	0.0006	0.0006	0.0090
1230	165.	2.12	******	******	******	******	******	******	******	******	******	******	******
1245	180.	2.10	0.048	0.207	0.172	0.0040	0.0120	0.0024	0.0490	0.0016	0.0006	0.0006	0.0112
1300	195.	2.16	******	******	******	******	******	******	******	******	******	******	******
1315	210.	2.14	0.048	******	0.188	0.0046	0.0140	0.0027	0.0600	0.0018	0.0006	0.0006	0.0128
1330	225.	2.17	******	******	******	******	******	******	******	******	******	******	******
1345	240.	2.25	0.080	0.201	0.182	0.0049	0.0140	0.0032	0.0650	0.0020	0.0008	0.0006	0.0142
1400	255.	2.23	******	******	******	******	******	******	******	******	******	******	******
1415	270.	2.31	0.102	******	0.199	0.0054	0.0160	0.0036	0.0770	0.0022	0.0010	0.0007	0.0159
1430	285.	2.34	******	******	******	******	******	******	******	******	******	******	******
1445	300.	2.36	0.120	0.199	0.182	0.0054	0.0200	******	0.0760	0.0024	0.0008	0.0006	0.0167
1500	315.	2.38	******	******	******	******	******	******	******	******	******	******	******
1515	330.	2.47	0.137	******	0.185	0.0061	0.0220	0.0040	0.0890	0.0024	0.0008	0.0007	0.0164
1530	345.	2.49	******	******	******	******	******	******	******	******	******	******	******
1545	360.	2.46	0.149	0.187	0.173	0.0060	0.0190	0.0034	0.0760	0.0024	0.0011	0.0008	0.0168
1600	375.	2.49	******	******	******	******	******	******	******	******	******	******	******
1615	390.	2.46	0.162	******	0.196	0.0065	0.0230	0.0040	0.0980	0.0024	0.0011	0.0008	0.0175
1630	405.	2.50	******	******	******	******	******	******	******	******	******	******	******
1645	420.	2.58	0.149	******	0.179	0.0062	0.0220	0.0040	0.0870	0.0022	0.0008	0.0008	0.0173
1700	435.	2.65	0.158	******	******	******	******	******	******	******	0.0011	0.0007	******

EC -106
PROPENE + BUTANE
1975 OCT 14

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	84.8	44.0	12.70	0.333	20.00
1000	15.	86.5	44.0	******	******	******
1015	30.	85.2	44.5	******	******	******
1030	45.	85.2	46.5	******	******	******
1045	60.	85.2	48.5	12.60	0.333	20.00
1100	75.	85.0	50.5	12.60	0.328	******
1115	90.	84.8	52.0	******	******	******
1130	105.	85.2	54.0	******	******	******
1145	120.	85.2	55.0	12.70	0.332	20.00
1200	135.	85.2	55.5	******	******	******
1215	150.	85.2	55.5	******	******	******
1230	165.	85.2	55.5	******	******	******
1245	180.	85.0	55.5	12.70	0.332	20.00
1300	195.	85.0	55.0	******	******	******
1315	210.	85.2	55.0	******	******	******
1330	225.	85.2	55.0	******	******	******
1345	240.	85.2	54.5	12.70	0.331	20.00
1400	255.	85.2	54.5	******	******	******
1415	270.	85.5	54.5	******	******	******
1430	285.	85.2	54.0	******	******	******
1445	300.	85.5	53.5	******	******	20.00
1500	315.	86.0	53.0	******	******	******
1515	330.	85.5	52.0	******	******	******
1530	345.	85.7	51.5	******	******	******
1545	360.	86.0	51.5	12.70	0.331	20.00
1600	375.	86.0	51.0	******	******	******
1615	390.	86.2	50.5	******	******	******
1630	405.	86.2	50.0	******	******	******
1645	420.	86.2	49.5	******	******	******
1700	435.	86.0	49.0	******	******	******

EC -113
PROPENE + BUTANE
1975 NOV 24

BEGIN IRRADIATION 1030; 0.25 INCH PYREX FILTER
LAST HCHO SAMPLE STARTED AT 1615 HOURS; ALL HCHO SAMPLES TURNED YELLOW
PROPYLENE OXIDE NOT SEPARATED FROM HC PEAK
ALL NITRATES FROM FID GC; C1-N <0.1PPB, C2-N 0.6PPB ON EC GC AT 1630
GC-MS SAMPLES TAKEN AFTER RUN
OZONE FACTOR 0.8, CO FACTOR 2.20/1.17

T=0 AT 1030 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1

TS	DEG K	AVERAGE	302.7
REL HUM	%	AVERAGE	49.06
SSPOWER	KW	AVERAGE	12.85
RADIOM	MW/CM2	AVERAGE	0.331
H2O	PPM	AVERAGE	2.000E 04
NO	PPM	INIT COND	0.091
NO2-CORR	PPM	INIT COND	0.020
PROPENE	PPM	INIT COND	0.410
N-C4	PPM	INIT COND	2.040
CO	PPM	INIT COND	1.341
ACETONE	PPM	INIT COND	0.003
C2-N	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

K1=0.35 MIN-1

SAMPLING RATE = 1.783 L/MIN

54 GC SAMPLES TAKEN

EC -113
PROPENE + BUTANE
1975 NOV 24

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM
1030	0.	0.0	0.091	0.020	0.111	0.410	2.04
1045	15.	0.006	0.043	0.063	0.105	0.388	2.05
1100	30.	0.078	0.017	0.080	0.097	0.350	2.02
1115	45.	0.160	0.010	0.070	0.081	0.314	******
1130	60.	0.233	0.009	0.056	0.065	0.260	1.98
1145	75.	0.281	0.008	0.044	0.051	0.224	1.93
1200	90.	0.317	0.007	0.031	0.038	0.185	1.92
1215	105.	0.338	0.007	0.023	0.030	0.164	******
1230	120.	0.348	0.007	0.016	0.022	0.140	1.86
1245	135.	0.348	0.006	0.009	0.015	0.120	1.87
1300	150.	0.348	0.006	0.004	0.010	0.106	1.86
1315	165.	0.340	0.006	0.001	0.007	0.094	1.84
1330	180.	0.336	0.006	0.0	0.004	0.080	1.84
1345	195.	0.330	0.006	0.0	0.003	0.075	1.82
1400	210.	0.324	0.006	0.0	0.002	0.065	1.81
1415	225.	0.319	0.006	0.0	0.002	0.061	1.80
1430	240.	0.315	0.006	0.0	0.002	0.055	1.78
1445	255.	0.311	0.005	0.0	0.001	0.046	1.77
1500	270.	0.309	0.005	0.0	0.001	0.043	1.72
1515	285.	0.305	0.005	0.0	0.002	0.038	1.74
1530	300.	0.305	0.005	0.0	0.003	0.035	1.73
1545	315.	0.301	0.005	0.0	0.001	0.031	1.72
1600	330.	******	******	******	******	0.026	1.72
1615	345.	0.299	0.005	0.0	0.0	0.025	******
1630	360.	0.297	0.005	0.0	0.000	0.021	1.69

EC -113
PROPENE + BUTANE
1975 NOV 24

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM	C3-N-1 PPM C-600	C4-N-2 PPM C-600	C4-N-1 PPM C-600
1030	0.	1.34	0.000	******	******	0.0002	0.0034	******	0.0002	0.0006	0.0	0.0	******
1045	15.	1.45	******	******	******	******	******	******	******	******	******	******	******
1100	30.	1.38	0.004	******	0.050	0.0010	0.0049	0.0011	0.0134	0.0006	0.0	0.0023	0.0
1115	45.	1.42	******	******	******	******	******	******	******	******	******	******	******
1130	60.	1.51	0.020	******	0.114	0.0025	0.0080	0.0024	0.0281	0.0002	0.0	0.0057	0.0006
1145	75.	1.53	******	******	******	******	******	******	******	******	******	******	******
1200	90.	1.53	0.037	******	0.144	0.0036	0.0100	0.0030	0.0403	0.0006	0.0003	0.0078	0.0010
1215	105.	1.55	******	******	******	******	******	******	******	******	******	******	******
1230	120.	1.51	0.047	******	0.173	0.0040	0.0099	0.0041	0.0466	0.0005	0.0003	0.0085	0.0010
1245	135.	1.63	******	******	******	******	******	******	******	******	******	******	******
1300	150.	1.64	0.056	******	0.166	0.0036	0.0099	0.0038	0.0535	******	0.0007	******	0.0014
1315	165.	1.70	******	******	******	******	******	******	******	******	******	******	******
1330	180.	1.75	0.059	******	0.178	0.0036	0.0133	0.0042	0.0562	0.0006	0.0010	0.0101	0.0010
1345	195.	1.68	******	******	******	******	******	******	******	******	******	******	******
1400	210.	1.77	0.060	******	0.168	0.0034	0.0128	0.0046	0.0567	0.0008	0.0007	0.0098	0.0019
1415	225.	1.77	******	******	******	******	******	******	******	******	******	******	******
1430	240.	1.84	0.059	******	0.160	0.0031	0.0149	0.0049	0.0623	0.0009	0.0007	0.0102	0.0020
1445	255.	1.84	******	******	******	******	******	******	******	******	******	******	******
1500	270.	1.87	0.060	******	0.169	0.0032	0.0163	0.0048	0.0631	0.0006	0.0013	0.0105	0.0013
1515	285.	1.93	******	******	******	******	******	******	******	******	******	******	******
1530	300.	1.96	0.058	******	0.194	0.0038	0.0163	0.0054	0.0670	0.0013	0.0012	0.0108	0.0007
1545	315.	1.93	******	******	******	******	******	******	******	******	******	******	******
1600	330.	******	0.059	******	0.184	0.0038	0.0189	0.0057	0.0705	0.0011	0.0012	0.0114	0.0015
1615	345.	1.99	******	******	******	******	******	******	******	******	******	******	******
1630	360.	2.02	0.059	******	0.158	0.0031	0.0168	0.0053	0.0705	0.0021	0.0009	0.0111	0.0017

EC -113
PROPENE + BUTANE
1975 NOV 24

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1030	0.	70.6	41.5	12.40	0.303	25.00
1045	15.	84.8	41.5	13.30	0.337	******
1100	30.	85.0	43.5	******	0.332	******
1115	45.	85.2	45.5	******	******	******
1130	60.	85.0	47.5	******	******	20.00
1145	75.	******	49.5	******	0.340	******
1200	90.	85.2	50.5	******	******	******
1215	105.	85.5	50.5	******	******	******
1230	120.	85.5	50.5	******	0.305	20.00
1245	135.	85.2	51.0	******	******	******
1300	150.	85.0	51.5	******	0.322	******
1315	165.	84.8	52.5	******	0.327	******
1330	180.	85.0	52.5	******	0.332	20.00
1345	195.	85.2	52.0	******	******	******
1400	210.	85.5	51.5	******	0.332	******
1415	225.	85.7	50.5	******	0.330	******
1430	240.	85.2	50.5	******	0.335	20.00
1445	255.	85.5	50.0	******	0.332	******
1500	270.	85.5	50.0	******	0.322	******
1515	285.	86.0	49.5	******	0.332	******
1530	300.	85.5	49.0	******	0.340	20.00
1545	315.	85.5	49.0	******	******	******
1600	330.	******	******	******	******	******
1615	345.	86.2	48.0	******	0.293	20.00
1630	360.	86.5	47.0	******	0.327	******

EC -114
PROPENE + BUTANE
1975 DEC 24

BEGIN IRRADIATION 1030; 0.25 INCH PYREX FILTER
OZONE FACTOR 0.8, CO FACTOR 2.20/1.14

T=0 AT 1030 PST

	CALIB#
PAN	9
REL HUM	3
HCHO	1
REL INT	1

TS	DEG K	AVERAGE	302.9
REL HUM	%	AVERAGE	63.34
RADIOM	MW/CM2	AVERAGE	0.328
H2O	PPM	AVERAGE	2.502E 04
NO	PPM	INIT COND	0.794
NO2-CORR	PPM	INIT COND	0.204
PROPENE	PPM	INIT COND	0.706
N-C4	PPM	INIT COND	3.660
CO	PPM	INIT COND	1.329
HCHO	PPM	INIT COND	0.008
ACETONE	PPM	INIT COND	0.003
C4-N-1	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.135
430.	1.861
403.	1.655
380.	1.460
370.	1.335
360.	1.163
350.	1.000
340.	0.762
330.	0.529
320.	0.313
310.	0.132
300.	0.034
290.	0.002
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.783 L/MIN

54 GC SAMPLES TAKEN

EC -114
PROPENE + BUTANE
1975 DEC 24

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM
1030	0.	0.0	0.794	0.204	0.996	0.766	3.66
1045	15.	0.0	0.657	0.328	0.983	0.710	3.62
1100	30.	0.0	0.518	0.438	0.953	0.664	3.60
1115	45.	0.0	0.374	0.550	0.924	0.600	3.55
1130	60.	0.002	0.256	0.633	0.890	0.548	3.52
1145	75.	0.018	0.173	0.683	0.854	0.504	3.47
1200	90.	0.055	0.117	0.701	0.818	0.452	3.44
1215	105.	0.100	0.073	0.698	0.774	0.404	3.38
1230	120.	0.156	0.051	0.676	0.728	0.356	3.36
1245	135.	0.211	0.039	0.636	0.675	0.310	3.33
1300	150.	0.276	0.027	0.590	0.617	0.286	3.33
1315	165.	0.332	0.024	0.532	0.554	0.254	3.26
1330	180.	0.391	0.020	0.468	0.485	0.194	3.23
1345	195.	0.444	0.015	0.409	0.421	0.158	3.17
1400	210.	0.494	0.012	0.347	0.359	0.120	3.17
1415	225.	0.549	0.012	0.276	0.288	0.088	3.12
1430	240.	0.596	0.010	0.217	0.227	0.080	3.09
1445	255.	0.643	0.010	0.173	0.180	0.064	3.07
1500	270.	0.678	0.007	0.131	0.138	0.044	3.04
1515	285.	0.711	0.010	0.092	0.099	0.038	3.01
1530	300.	0.729	0.010	0.056	0.065	0.030	2.98
1545	315.	0.741	0.010	0.043	0.051	0.026	2.94
1600	330.	0.745	0.010	0.029	0.038	0.016	2.74
1615	345.	0.741	0.007	0.021	0.028	0.014	2.91
1630	360.	0.733	0.010	0.018	0.023	0.014	2.88

EC -114
PROPENE + BUTANE
1975 DEC 24

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	C2-N PPM	C4-N-2 PPM C-600	C4-N-1 PPM C-600
1030	0.	1.33	0.000	0.008	******	0.0002	0.0034	0.0	0.000	******	0.0	0.0	0.0	0.0005
1045	15.	1.31	******	******	******	******	******	******	******	******	******	******	******	******
1100	30.	1.35	0.003	******	******	0.0011	0.0032	0.0010	0.019	******	0.0	0.0	0.0033	0.0006
1115	45.	1.38	******	******	******	******	******	******	******	******	******	******	******	******
1130	60.	1.43	0.012	0.191	0.156	0.0027	0.0046	0.0017	0.018	******	0.0003	0.0004	0.0076	0.0013
1145	75.	1.48	******	******	******	******	******	******	******	******	******	******	******	******
1200	90.	1.50	0.025	******	0.221	0.0045	0.0103	0.0028	0.061	0.0035	0.0006	0.0006	0.0113	0.0016
1215	105.	1.50	******	******	******	******	******	******	******	******	******	******	******	******
1230	120.	1.63	0.050	0.306	0.265	0.0063	0.0159	0.0038	0.079	******	0.0011	0.0008	0.0145	0.0021
1245	135.	1.60	******	******	******	******	******	******	******	******	******	******	******	******
1300	150.	1.61	0.073	******	0.322	0.0076	0.0225	0.0044	0.094	0.0078	0.0022	0.0011	0.0176	0.0021
1315	165.	1.77	******	******	******	******	******	******	******	******	******	******	******	******
1330	180.	1.72	0.107	0.419	0.377	0.0091	0.0278	0.0055	0.108	0.0090	0.0025	0.0014	0.0221	0.0026
1345	195.	1.77	******	******	******	******	******	******	******	******	******	******	******	******
1400	210.	1.84	0.137	******	0.379	0.0095	0.0314	0.0060	0.134	0.0097	0.0028	0.0015	0.0216	0.0026
1415	225.	1.90	******	******	******	******	******	******	******	******	******	******	******	******
1430	240.	1.88	0.176	0.433	0.371	0.0099	******	0.0066	0.144	0.0083	0.0028	0.0017	0.0269	0.0032
1445	255.	1.98	******	******	******	******	******	******	******	******	******	******	******	******
1500	270.	1.95	0.196	******	0.427	0.0110	0.0427	0.0075	0.160	0.0084	0.0029	0.0020	0.0307	0.0037
1515	285.	2.02	******	******	******	******	******	******	******	******	******	******	******	******
1530	300.	2.13	0.231	0.419	0.336	0.0097	0.0417	0.0075	0.175	0.0089	0.0031	0.0018	0.0308	0.0028
1545	315.	2.14	******	******	******	******	******	******	******	******	******	******	******	******
1600	330.	2.18	0.231	******	0.382	0.0108	0.0364	0.0087	0.175	0.0089	0.0031	0.0020	0.0339	0.0043
1615	345.	2.16	******	******	******	******	******	******	******	******	******	******	******	******
1630	360.	2.26	0.231	0.338	0.387	0.0112	0.0346	0.0088	0.182	0.0089	0.0031	0.0020	0.0346	0.0046

EC -114
PROPENE + BUTANE
1975 DEC 24

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	RADIOM MW/CM2	HCHO VOL L
1030	0.	73.8	53.5	******	25.00
1045	15.	85.2	53.5	0.322	******
1100	30.	85.2	53.5	0.325	******
1115	45.	85.5	54.0	0.327	******
1130	60.	85.0	54.0	0.330	20.00
1145	75.	85.2	54.0	******	******
1200	90.	85.7	54.5	0.342	******
1215	105.	85.2	54.5	******	******
1230	120.	85.7	54.5	0.337	20.00
1245	135.	85.7	54.5	******	******
1300	150.	86.0	54.5	******	******
1315	165.	85.7	54.5	******	******
1330	180.	85.5	54.5	******	20.00
1345	195.	85.5	54.5	******	******
1400	210.	86.0	54.5	******	******
1415	225.	85.7	54.5	******	******
1430	240.	86.2	54.5	0.325	20.00
1445	255.	86.0	54.5	******	******
1500	270.	86.0	54.5	******	******
1515	285.	85.7	54.5	0.325	******
1530	300.	86.2	54.5	0.330	20.00
1545	315.	85.7	54.5	0.330	******
1600	330.	86.5	54.5	******	******
1615	345.	86.7	54.0	******	******
1630	360.	86.7	54.5	0.335	20.00

EC -115
PROPENE + BUTANE
1975 DEC 3

BEGIN IRRADIATION 1045; 0.25 INCH PYREX FILTER
OZONE FACTOR 0.8, CO FACTOR 2.20/1.11

T=0 AT 1045 PST

	CALIB#
PAN	9
REL HUM	3
HCHO	1
REL INT	1

TS	DEG K	AVERAGE	302.8
REL HUM	%	AVERAGE	53.69
RADIOM	MW/CM2	AVERAGE	0.335
H2O	PPM	AVERAGE	2.208E 04
NO	PPM	INIT COND	0.402
NO2-CORR	PPM	INIT COND	0.104
PROPENE	PPM	INIT COND	0.310
N-C4	PPM	INIT COND	2.940
CO	PPM	INIT COND	1.404
HCHO	PPM	INIT COND	0.012
ACETONE	PPM	INIT COND	0.003
PROX	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.174
430.	1.978
403.	1.703
380.	1.478
370.	1.336
360.	1.169
350.	1.000
340.	0.758
330.	0.535
320.	0.317
310.	0.124
300.	0.033
290.	0.002
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.664 L/MIN

54 GC SAMPLES TAKEN

EC -115
PROPENE + BUTANE
1975 DEC 3

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM
1045	0.	0.0	0.402	0.104	0.506	0.310	2.94
1100	15.	0.0	0.349	0.148	0.497	0.294	2.91
1115	30.	0.0	0.287	0.203	0.490	0.278	2.90
1130	45.	0.0	0.227	0.254	0.480	0.278	2.88
1145	60.	0.002	0.165	0.303	0.468	0.242	2.86
1200	75.	0.016	0.118	0.339	0.455	0.244	2.78
1215	90.	0.041	0.083	0.357	0.439	0.220	2.78
1230	105.	0.066	0.060	0.362	0.422	0.188	2.75
1245	120.	0.102	0.045	0.356	0.401	0.168	2.75
1300	135.	0.141	0.035	0.347	0.381	0.148	2.69
1315	150.	0.180	0.028	0.329	0.357	0.134	2.67
1330	165.	0.215	0.024	0.308	0.332	0.126	2.62
1345	180.	0.254	0.020	0.289	0.307	0.104	2.61
1400	195.	0.287	0.017	0.262	0.279	0.090	2.59
1415	210.	0.322	0.015	0.237	0.250	0.078	2.58
1430	225.	0.362	0.013	0.208	0.221	0.068	2.54
1445	240.	0.395	0.012	0.184	0.195	0.058	2.51
1500	255.	0.428	0.011	0.159	0.170	0.046	2.50
1515	270.	0.461	0.011	0.136	0.147	0.040	2.46
1530	285.	0.489	0.010	0.111	0.121	0.034	2.45
1545	300.	0.516	0.010	0.087	0.095	0.028	2.43
1600	315.	0.539	0.009	0.070	0.077	0.022	2.40
1615	330.	0.559	0.009	0.052	0.059	0.020	2.38
1630	345.	0.573	0.007	0.049	0.056	0.014	2.37
1645	360.	0.582	0.007	0.046	0.052	0.010	2.35
1700	375.	0.586	0.007	0.028	0.034	0.010	2.32
1715	390.	0.588	0.007	0.011	0.019	0.008	2.30
1730	405.	0.588	0.007	0.006	0.013	0.008	2.23
1745	420.	0.590	0.007	0.002	0.008	0.006	******
1800	435.	0.586	0.007	0.006	0.013	0.005	2.26
1815	450.	0.584	0.007	0.012	0.018	0.004	2.24

EC -115
PROPENE + BUTANE
1975 DEC 3

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	C2-N PPM	C4-N-2 PPM C-600	C4-N-1 PPM C-600
1045	0.	1.40	0.000	0.012	******	0.0004	0.0031	0.0	0.000	0.0011	0.0	0.0	0.0005	0.0003
1100	15.	1.43	******	******	******	******	******	******	******	******	******	******	******	******
1115	30.	1.36	0.001	******	0.019	******	0.0026	0.0005	0.009	******	0.0	0.0	0.0017	******
1130	45.	1.47	******	******	******	******	******	******	******	******	******	******	******	******
1145	60.	1.31	0.004	0.083	0.056	0.0008	0.0040	0.0011	0.022	******	0.0	0.0	0.0046	0.0005
1200	75.	1.54	******	******	******	******	******	******	******	******	******	******	******	******
1215	90.	1.52	0.007	******	0.098	0.0019	0.0067	0.0020	0.040	******	0.0	0.0	0.0070	0.0014
1230	105.	1.90	******	******	******	******	******	******	******	******	******	******	******	******
1245	120.	1.56	0.017	0.141	0.116	0.0026	0.0086	0.0023	0.046	******	0.0	0.0	0.0097	0.0012
1300	135.	1.60	******	******	******	******	******	******	******	******	******	******	******	******
1315	150.	1.65	0.030	******	0.134	0.0033	0.0122	0.0029	0.060	******	0.0003	0.0003	0.0108	0.0018
1330	165.	1.68	******	******	******	******	******	******	******	******	******	******	******	******
1345	180.	1.78	******	0.171	0.164	0.0045	0.0153	0.0038	0.076	******	******	******	0.0116	0.0018
1400	195.	1.76	******	******	******	******	******	******	******	******	******	******	******	******
1415	210.	1.80	******	******	0.179	0.0047	0.0130	0.0046	0.078	******	******	******	0.0161	0.0024
1430	225.	1.73	******	******	******	******	******	******	******	******	******	******	******	******
1445	240.	1.77	0.071	******	0.173	0.0054	0.0173	0.0044	0.092	******	0.0006	0.0007	0.0182	0.0027
1500	255.	1.81	******	******	******	******	******	******	******	******	******	******	******	******
1515	270.	1.91	0.084	******	0.196	0.0058	0.0200	0.0049	0.108	******	0.0007	0.0007	0.0194	0.0020
1530	285.	1.88	******	******	******	******	******	******	******	******	******	******	******	******
1545	300.	1.95	0.102	0.201	******	0.0059	0.0189	0.0057	0.116	******	0.0007	0.0008	0.0218	0.0031
1600	315.	1.98	******	******	******	******	******	******	******	******	******	******	******	******
1615	330.	2.04	0.114	******	0.222	0.0072	0.0320	0.0058	0.132	0.0036	0.0008	0.0010	0.0237	0.0030
1630	345.	2.04	******	******	******	******	******	******	******	******	******	******	******	******
1645	360.	2.04	0.107	0.183	0.179	0.0073	0.0252	0.0058	0.122	******	0.0007	0.0006	0.0246	0.0028
1700	375.	2.15	******	******	******	******	******	******	******	******	******	******	******	******
1715	390.	2.17	0.130	******	0.206	0.0068	0.0214	0.0066	0.130	0.0028	0.0008	0.0011	0.0254	0.0034
1730	405.	2.15	******	******	******	******	******	******	******	******	******	******	******	******
1745	420.	2.20	0.134	******	0.205	0.0072	0.0270	0.0068	0.145	0.0028	0.0006	0.0006	0.0262	0.0033
1800	435.	2.22	******	******	******	******	******	******	******	******	******	******	******	******
1815	450.	2.36	0.119	******	0.198	0.0075	0.0267	0.0072	0.145	******	0.0011	0.0011	0.0276	******

EC -115
PROPENE + BUTANE
1975 DEC 3

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	RADIOM MW/CM2	HCHO VOL L
1045	0.	75.2	48.5	******	20.00
1100	15.	86.5	49.0	0.337	******
1115	30.	85.2	51.0	******	******
1130	45.	86.2	53.5	0.332	******
1145	60.	85.2	54.0	0.335	20.00
1200	75.	85.2	54.0	******	******
1215	90.	85.2	54.0	0.332	******
1230	105.	85.0	54.5	******	******
1245	120.	85.0	54.5	0.332	20.00
1300	135.	85.2	54.5	******	******
1315	150.	85.5	54.0	0.335	******
1330	165.	84.8	54.5	******	******
1345	180.	85.5	54.5	******	20.00
1400	195.	85.7	54.0	******	******
1415	210.	85.2	54.0	******	******
1430	225.	85.2	54.0	******	******
1445	240.	85.5	54.0	0.332	******
1500	255.	86.2	54.0	******	******
1515	270.	85.5	54.0	******	******
1530	285.	85.7	54.0	******	******
1545	300.	85.5	54.0	******	20.00
1600	315.	85.7	54.0	******	******
1615	330.	85.2	54.0	0.325	******
1630	345.	85.7	54.0	0.330	******
1645	360.	85.2	54.0	0.327	20.00
1700	375.	84.8	54.0	******	******
1715	390.	85.5	54.0	0.332	******
1730	405.	85.2	54.0	******	******
1745	420.	86.2	54.0	******	******
1800	435.	86.2	54.0	******	******
1815	450.	86.7	54.0	0.342	******

EC -116
PROPENE + BUTANE
1975 DEC 4

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER
OZONE FACTOR 0.8, CO FACTOR 2.20/1.09

T=0 AT 930 PST

	CALIB#
PAN	9
REL HUM	3
HCHO	1
REL INT	1

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	53.71
RADIOM	MW/CM2	AVERAGE	0.332
H2O	PPM	AVERAGE	2.231E 04
NO	PPM	INIT COND	0.391
NO2-CORR	PPM	INIT COND	0.104
PROPENE	PPM	INIT COND	0.824
N-C4	PPM	INIT COND	4.000
CO	PPM	INIT COND	1.385
HCHO	PPM	INIT COND	0.005
ACETONE	PPM	INIT COND	0.003
C4-N-1	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.154
430.	1.923
403.	1.689
380.	1.464
370.	1.342
360.	1.183
350.	1.000
340.	0.754
330.	0.534
320.	0.323
310.	0.128
300.	0.034
290.	0.002
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.727 L/MIN

64 GC SAMPLES TAKEN

EC -116
PROPENE + BUTANE
1975 DEC 4

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM
930	0.	0.0	0.391	0.104	0.493	0.824	4.00
945	15.	0.0	0.292	0.196	0.487	0.780	3.98
1000	30.	0.002	0.183	0.288	0.471	0.720	3.94
1015	45.	0.035	0.079	0.364	0.446	0.672	3.89
1030	60.	0.133	0.038	0.382	0.420	0.600	3.87
1045	75.	0.268	0.022	0.353	0.375	0.544	3.82
1100	90.	0.403	0.016	0.306	0.321	0.408	3.76
1115	105.	0.526	0.013	0.242	0.254	0.328	3.68
1130	120.	0.619	0.011	0.176	0.187	0.250	3.58
1145	135.	0.686	0.011	0.126	0.136	0.192	3.58
1200	150.	0.719	0.010	0.077	0.085	0.152	3.54
1215	165.	0.741	0.010	0.051	0.061	0.118	3.52
1230	180.	0.741	0.010	0.032	0.039	0.088	3.50
1245	195.	0.731	0.009	0.017	0.026	0.072	3.41
1300	210.	0.719	0.009	0.006	0.013	0.056	3.39
1315	225.	0.707	0.009	-0.001	0.006	0.046	3.39
1330	240.	0.694	0.007	-0.009	-0.001	0.038	3.41
1345	255.	0.680	0.007	-0.009	-0.003	0.032	3.36
1400	270.	0.668	0.007	-0.011	-0.005	0.020	3.34
1415	285.	0.659	0.007	-0.010	-0.004	0.018	3.33
1430	300.	0.649	0.007	-0.010	-0.003	0.014	3.30
1445	315.	0.639	0.007	-0.009	-0.003	0.014	3.26
1500	330.	0.633	0.006	-0.009	-0.003	0.010	3.17
1515	345.	0.627	0.007	-0.013	-0.007	0.006	3.26
1530	360.	0.619	0.006	-0.015	-0.009	0.010	3.25

EC -116
PROPENE + BUTANE
1975 DEC 4

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	RADIOM MW/CM2	HCHO VOL L
930	0.	85.0	52.0	0.335	25.00
945	15.	85.7	52.0	0.335	******
1000	30.	85.2	52.0	******	******
1015	45.	85.2	53.0	******	******
1030	60.	85.5	53.5	0.330	20.00
1045	75.	85.5	54.0	******	******
1100	90.	86.0	54.0	******	******
1115	105.	85.7	54.0	******	******
1130	120.	86.5	54.0	0.335	20.00
1145	135.	86.0	54.0	******	******
1200	150.	86.0	54.0	0.330	******
1215	165.	86.0	54.0	******	******
1230	180.	85.7	54.0	0.330	20.00
1245	195.	86.0	54.0	******	******
1300	210.	86.0	54.0	0.327	******
1315	225.	85.2	54.0	******	******
1330	240.	85.2	54.0	0.332	20.00
1345	255.	85.2	54.0	******	******
1400	270.	85.2	54.0	0.330	******
1415	285.	86.0	54.0	0.327	******
1430	300.	86.0	54.0	0.332	20.00
1445	315.	86.2	54.0	******	******
1500	330.	86.5	54.0	******	******
1515	345.	86.2	54.0	******	******
1530	360.	86.2	54.0	0.335	******

EC -121
PROPENE
1976 FEB 26

BEGIN IRRADIATION 1000, 0.25 INCH PYREX FILTER
CO FACTOR 2.2/1.22
RADIOMETER CORRECTION -0.01 MW/CM2

T=0 AT 1000 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	2

TS	DEG K	AVERAGE	304.2
REL HUM	%	AVERAGE	56.82
SSPOWER	KW	AVERAGE	13.23
RADIOM	MW/CM2	AVERAGE	0.413
H2O	PPM	AVERAGE	2.548E 04
NO	PPM	INIT COND	0.410
NO2-CORR	PPM	INIT COND	0.101
CO	PPM	INIT COND	2.193
ACETALD	PPM	INIT COND	0.005
ACETONE	PPM	INIT COND	0.005
PROPENE	PPM	INIT COND	0.483

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.993
430.	1.874
403.	1.623
380.	1.435
370.	1.310
360.	1.182
350.	1.000
340.	0.760
330.	0.513
320.	0.255
310.	0.087
300.	0.016
290.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.768 L/MIN

54 GC SAMPLES TAKEN

EC -121
PROPENE
1976 FEB 26

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	PROX PPM	ME-N PPM
1000	0.	0.0	0.410	0.101	0.510	0.483	2.19	0.000	0.0	0.005	0.0004	0.0055	0.0001	0.0
1015	15.	0.0	0.260	0.230	0.491	0.410	2.37	******	******	******	******	******	******	******
1030	30.	0.020	0.143	0.320	0.464	0.335	2.38	0.008	******	0.076	0.0010	0.0069	******	0.0
1045	45.	0.046	0.082	0.341	0.419	0.275	2.37	******	******	******	******	******	******	******
1100	60.	0.100	0.060	0.323	0.384	0.231	2.45	0.027	0.201	0.141	0.0020	0.0101	0.0007	0.0036
1115	75.	0.122	0.040	0.311	0.352	0.191	2.45	******	******	******	******	******	******	******
1130	90.	0.169	0.029	0.288	0.317	0.162	2.57	0.050	******	0.148	0.0028	0.0115	0.0007	0.0036
1145	105.	0.213	0.024	0.263	0.288	0.133	2.58	******	******	******	******	******	******	******
1200	120.	0.249	0.021	0.237	0.257	0.111	2.59	0.067	0.278	0.148	0.0032	0.0174	0.0010	0.0011
1215	135.	0.269	0.016	0.213	0.227	0.087	2.70	******	******	******	******	******	******	******
1230	150.	0.310	0.015	0.191	0.205	0.071	2.72	0.084	******	0.162	0.0036	0.0254	0.0019	0.0014
1245	165.	0.344	0.013	0.165	0.179	0.058	2.74	******	******	******	******	******	******	******
1300	180.	0.364	0.011	0.139	0.148	0.043	2.78	0.105	0.262	0.143	0.0040	0.0200	0.0018	0.0014
1315	195.	0.391	0.011	0.114	0.125	0.032	2.83	******	******	******	******	******	******	******
1330	210.	0.415	0.010	0.093	0.102	0.028	2.86	******	******	0.125	0.0041	0.0237	0.0015	******
1345	225.	0.430	0.010	0.073	0.081	0.022	2.66	******	******	******	******	******	******	******
1400	240.	0.452	0.007	0.054	0.061	0.016	2.92	0.141	0.228	0.109	0.0041	0.0188	0.0017	0.0017
1415	255.	0.471	0.009	0.042	0.050	0.013	2.98	******	******	******	******	******	******	******
1430	270.	0.484	0.007	0.036	0.043	0.009	3.02	******	******	0.110	0.0047	0.0272	0.0022	******
1445	285.	0.493	0.007	0.021	0.030	0.007	2.99	0.153	******	******	******	******	******	0.0015
1500	300.	0.501	0.007	0.022	0.029	0.006	3.09	0.149	0.197	0.079	0.0036	0.0253	0.0013	0.0015
1515	315.	0.506	0.007	0.014	0.021	0.004	3.09	******	******	******	******	******	******	******
1530	330.	0.501	0.007	0.008	0.016	0.003	3.15	0.158	******	0.076	0.0040	0.0197	0.0014	0.0015
1545	345.	0.503	0.007	0.0	0.006	0.003	3.18	******	******	******	******	******	******	******
1600	360.	0.501	0.007	0.0	0.0	0.002	3.19	0.167	0.171	0.066	0.0037	0.0271	0.0017	0.0017
1615	375.	0.498	0.007	0.0	0.0	0.002	3.20	******	******	******	******	******	******	******

EC -121
PROPENE
1976 FEB 26

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MR/CM2	HCHO VOL L
1000	0.	87.0	49.0	13.20	******	25.00
1015	15.	90.1	46.5	******	0.410	******
1030	30.	90.4	50.0	13.20	******	******
1045	45.	89.4	52.0	******	******	******
1100	60.	88.7	54.0	******	0.398	20.00
1115	75.	89.2	56.5	******	******	******
1130	90.	89.6	59.0	******	******	******
1145	105.	90.1	59.0	13.60	0.413	******
1200	120.	88.9	59.5	******	0.395	20.00
1215	135.	88.2	60.5	******	******	******
1230	150.	88.9	61.0	******	******	******
1245	165.	89.2	61.0	******	0.403	******
1300	180.	87.7	61.0	13.20	0.400	20.00
1315	195.	87.9	61.5	******	******	******
1330	210.	87.2	61.5	******	******	******
1345	225.	87.2	62.0	******	******	******
1400	240.	87.2	62.0	******	0.400	20.00
1415	255.	87.9	62.0	******	******	******
1430	270.	87.0	61.5	******	0.405	******
1445	285.	87.4	62.0	******	0.410	******
1500	300.	87.9	61.5	******	0.400	20.00
1515	315.	86.5	61.0	13.10	******	******
1530	330.	87.0	61.5	******	******	******
1545	345.	87.0	62.0	******	0.417	******
1600	360.	87.4	61.5	13.10	0.403	20.00
1615	375.	87.9	61.0	******	0.395	******

EC -122
BUTENE-1
1976 FEB 27

BEGIN IRRADIATION 0930, 0.25 INCH PYREX FILTER
CORRECTION FOR DECAY IN K1
C1-N ESTIMATED 0.3 PPB AT 1530
CO FACTOR 2.2/1.25
RADIOMETER CORRECTION -0.02 MW/CM2

T=0 AT 930 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	2

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	52.48
SSPOWER	KW	AVERAGE	13.22
RADION	MW/CM2	AVERAGE	0.426
H2O	PPM	AVERAGE	2.180E 04
NO	PPM	INIT COND	0.398
NO2-CORR	PPM	INIT COND	0.103
CO	PPM	INIT COND	1.674
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.002
1-C4=	PPM	INIT COND	0.217

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.973
430.	1.888
403.	1.632
380.	1.457
370.	1.312
360.	1.174
350.	1.000
340.	0.753
330.	0.514
320.	0.270
310.	0.096
300.	0.021
290.	0.0

K1=0.29 MIN-1

SAMPLING RATE = 1.730 L/MIN

54 GC SAMPLES TAKEN

EC -122
BUTENE-1
1976 FEB 27

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	1-C4= PPM
930	0.	0.0	0.398	0.103	0.500	0.217
945	15.	0.0	0.369	0.126	0.495	0.205
1000	30.	0.0	0.330	0.162	0.492	0.178
1015	45.	0.0	0.293	0.183	0.477	0.161
1030	60.	0.002	0.252	0.215	0.466	0.143
1045	75.	0.005	0.215	0.240	0.455	0.127
1100	90.	0.010	0.186	0.252	0.437	0.115
1115	105.	0.017	0.161	0.264	0.425	0.101
1130	120.	0.027	0.137	0.276	0.413	0.090
1145	135.	0.029	0.117	0.280	0.397	0.078
1200	150.	0.039	0.103	0.281	0.383	0.068
1215	165.	0.051	0.089	0.280	0.367	0.062
1230	180.	0.059	0.076	0.281	0.356	0.056
1245	195.	0.061	0.068	0.273	0.344	0.051
1300	210.	0.078	0.061	0.268	0.329	0.046
1315	225.	0.085	0.055	0.261	0.316	0.039
1330	240.	0.098	0.045	0.258	0.303	0.036
1345	255.	0.107	0.044	0.246	0.290	0.031
1400	270.	0.117	0.039	0.239	0.278	0.027
1415	285.	0.127	0.034	0.230	0.265	0.024
1430	300.	0.137	0.031	0.226	0.255	0.022
1445	315.	0.147	0.026	0.216	0.242	0.018
1500	330.	0.156	0.024	0.214	0.238	0.016
1515	345.	0.169	0.022	0.197	0.219	0.014
1530	360.	0.181	0.021	0.187	0.208	0.012
1545	375.	0.188	0.020	0.178	0.198	0.010
1600	390.	0.200	0.018	0.171	0.190	******
1615	405.	0.213	0.017	0.165	0.181	0.008
1630	420.	0.220	0.016	0.157	0.173	0.006

EC -122
BUTENE-1
1976 FEB 27

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	83.8	46.0	13.10	0.405	25.00
945	15.	85.0	45.5	******	******	******
1000	30.	84.5	47.0	******	******	******
1015	45.	84.5	49.5	******	******	******
1030	60.	84.8	52.0	13.10	0.400	20.00
1045	75.	85.0	54.0	******	******	******
1100	90.	85.0	55.0	******	******	******
1115	105.	85.2	56.0	******	0.403	******
1130	120.	85.5	56.5	******	0.407	20.00
1145	135.	85.2	56.0	******	0.412	******
1200	150.	85.7	56.5	******	******	******
1215	165.	85.5	56.5	******	******	******
1230	180.	85.2	56.5	13.20	0.425	20.00
1245	195.	85.0	57.0	******	******	******
1300	210.	85.5	57.5	******	******	******
1315	225.	86.0	57.0	******	******	******
1330	240.	85.2	56.0	13.10	0.403	20.00
1345	255.	86.0	55.5	******	******	******
1400	270.	86.2	54.5	******	******	******
1415	285.	86.5	53.5	******	******	******
1430	300.	86.2	52.5	******	0.403	20.00
1445	315.	86.7	52.0	******	******	******
1500	330.	86.5	51.0	******	******	******
1515	345.	86.0	51.0	******	******	******
1530	360.	86.2	51.5	13.60	0.407	20.00
1545	375.	86.2	51.0	******	0.400	******
1600	390.	86.5	50.5	******	0.412	******
1615	405.	87.0	50.5	******	0.410	******
1630	420.	87.2	49.5	******	0.412	******

EC -123
BUTENE-1
1976 MAR 1

BEGIN IRRADIATION 1000, 0.25 INCH PYREX FILTER
CORRECTION FOR DECAY IN K1
HNO3 MONITORED USING MODIFIED MAST, SAMPLING RATE 150 ML/MIN
BECKMAN 6800 OFF CHAMBER 1022-1407
C1-N ESTIMATED 0.6 PPB AT 1730
CO FACTOR 2.2/1.26, HNO3 EST. 2 PPB/DIV
RADIOMETER CORRECTION -0.02 MW/CM2

T=0 AT 1000 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	2

TS	DEG K	AVERAGE	303.2
REL HUM	%	AVERAGE	66.03
SSPOWER	KW	AVERAGE	13.28
RADIOM	MW/CM2	AVERAGE	0.502
H2O	PPM	AVERAGE	2.666E 04
NO	PPM	INIT COND	0.401
NO2-CORR	PPM	INIT COND	0.106
CO	PPM	INIT COND	1.881
HNO3	PPM	INIT COND	0.004
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002
1-C4=	PPM	INIT COND	0.404

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.786
430.	1.684
403.	1.510
380.	1.397
370.	1.281
360.	1.156
350.	1.000
340.	0.760
330.	0.535
320.	0.291
310.	0.118
300.	0.042
290.	0.0

K1=0.28 MIN-1

SAMPLING RATE = 1.876 L/MIN

66 GC SAMPLES TAKEN

EC -123
BUTENE-1
1976 MAR 1

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	1-C4= PPM
1000	0.	0.0	0.401	0.106	0.505	0.404
1015	15.	0.0	0.324	0.175	0.499	0.356
1030	30.	0.002	0.247	0.232	0.477	0.320
1045	45.	0.015	0.188	0.271	0.459	0.281
1100	60.	0.020	0.138	0.313	0.443	0.246
1115	75.	0.044	0.094	0.323	0.418	0.218
1130	90.	0.064	0.072	0.322	0.395	0.191
1145	105.	0.055	0.057	0.315	0.374	0.164
1200	120.	0.125	0.045	0.307	0.351	0.147
1215	135.	0.149	0.038	0.292	0.330	0.127
1230	150.	0.178	0.031	0.277	0.306	0.111
1245	165.	0.158	0.027	0.259	0.285	0.092
1300	180.	0.227	0.024	0.242	0.265	0.080
1315	195.	0.247	0.018	0.225	0.243	0.066
1330	210.	0.269	0.016	0.207	0.224	0.057
1345	225.	0.291	0.015	0.188	0.202	0.047
1400	240.	0.315	0.013	0.170	0.183	0.039
1415	255.	0.335	0.012	0.154	0.166	0.032
1430	270.	0.352	0.011	0.136	0.147	0.026
1445	285.	0.379	0.011	0.117	0.126	0.021
1500	300.	0.393	0.010	0.107	0.115	0.017
1515	315.	0.415	0.009	0.088	0.095	0.013
1530	330.	0.435	0.009	0.076	0.084	0.011
1545	345.	0.452	0.007	0.065	0.073	0.008
1600	360.	0.469	0.007	0.052	0.059	0.006
1615	375.	0.481	0.007	0.041	0.047	0.005
1630	390.	0.491	0.006	0.030	0.037	0.003
1645	405.	0.501	0.006	0.029	0.035	0.003
1700	420.	0.503	0.006	0.028	0.034	0.002
1715	435.	0.506	0.006	0.028	0.032	******
1730	450.	0.506	0.006	0.026	0.032	0.002

EC -123
BUTENE-1
1976 MAR 1

CLOCK TIME	ELAPSED T(MIN)	CO PPM	HNO3 PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	BUOX PPM	C2-N PPM
1000	0.	1.88	0.004	0.000	0.000	0.0	0.0015	0.0002	0.0019	0.0002	0.0000	0.0
1015	15.	1.90	0.005	******	******	******	******	******	******	******	******	******
1030	30.	******	0.006	0.001	0.002	******	0.0058	0.0613	0.0044	******	0.0006	0.0
1045	45.	******	0.006	******	******	******	******	******	******	******	******	******
1100	60.	******	******	0.002	0.010	0.127	0.0133	0.0975	0.0068	0.0011	0.0012	0.0
1115	75.	******	0.002	******	******	******	******	******	******	******	******	******
1130	90.	******	0.006	0.005	0.020	******	0.0288	0.1230	0.0095	0.0016	0.0020	0.0003
1145	105.	******	0.005	******	******	******	******	******	******	******	******	******
1200	120.	******	0.003	0.007	0.031	0.149	0.0273	0.1250	0.0106	0.0018	0.0023	0.0004
1215	135.	******	0.004	******	******	******	******	******	******	******	******	******
1230	150.	******	0.007	0.012	0.042	******	0.0351	0.1310	0.0108	0.0022	0.0026	0.0004
1245	165.	******	0.008	******	******	******	******	******	******	******	******	******
1300	180.	******	0.010	0.017	0.052	0.171	0.0407	0.1290	0.0144	0.0022	0.0030	0.0006
1315	195.	******	******	******	******	******	******	******	******	******	******	******
1330	210.	******	0.008	0.021	0.058	******	0.0421	0.1110	0.0168	0.0022	0.0027	0.0007
1345	225.	******	0.008	******	******	******	******	******	******	******	******	******
1400	240.	******	0.008	0.026	0.064	0.171	0.0495	0.1140	0.0201	0.0023	0.0031	0.0006
1415	255.	******	0.008	******	******	******	******	******	******	******	******	******
1430	270.	2.29	0.008	******	******	******	0.0534	0.0998	0.0188	0.0022	0.0030	******
1445	285.	2.31	******	******	******	******	******	******	******	******	******	******
1500	300.	2.35	******	0.040	0.076	0.181	0.0525	0.0790	0.0202	0.0018	0.0025	0.0011
1515	315.	2.37	******	******	******	******	******	******	******	******	******	******
1530	330.	2.38	******	0.047	0.077	******	******	0.0852	0.0263	0.0023	0.0035	0.0011
1545	345.	2.48	******	******	******	******	******	******	******	******	******	******
1600	360.	2.46	******	0.055	0.079	0.147	0.0587	0.0687	0.0260	0.0023	0.0035	0.0011
1615	375.	2.51	0.004	******	******	******	******	******	******	******	******	******
1630	390.	2.54	0.004	0.060	0.085	******	******	0.0502	0.0185	0.0020	0.0030	0.0014
1645	405.	2.50	0.005	******	******	******	******	******	******	******	******	******
1700	420.	2.64	0.005	******	******	0.119	0.0554	0.0464	0.0267	0.0023	0.0031	0.0014
1715	435.	2.58	******	******	******	******	******	******	******	******	******	******
1730	450.	2.67	******	0.065	0.076	******	0.0539	0.0382	0.0289	0.0023	0.0030	0.0014

EC -123
BUTENE-1
1976 MAR 1

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADICM MW/CM2	HCHO VOL L
1000	0.	84.3	61.5	13.10	0.395	20.00
1015	15.	84.3	60.5	******	0.383	******
1030	30.	83.3	62.0	******	0.390	******
1045	45.	83.5	65.0	******	******	******
1100	60.	83.3	67.0	******	0.398	20.00
1115	75.	84.0	69.0	******	0.405	******
1130	90.	84.8	70.0	******	******	******
1145	105.	84.5	71.0	******	******	******
1200	120.	84.5	71.0	******	******	20.00
1215	135.	85.0	72.0	******	******	******
1230	150.	85.7	71.0	******	******	******
1245	165.	84.8	70.0	******	******	******
1300	180.	85.5	69.5	13.30	0.410	20.00
1315	195.	85.0	69.0	******	******	******
1330	210.	84.3	69.5	******	******	******
1345	225.	84.3	69.0	******	******	******
1400	240.	84.3	69.0	13.30	0.415	20.00
1415	255.	85.2	69.0	******	******	******
1430	270.	84.3	69.0	******	******	******
1445	285.	84.5	69.0	******	******	******
1500	300.	85.0	69.0	13.60	0.412	20.00
1515	315.	85.0	67.5	******	******	******
1530	330.	85.7	67.5	******	******	******
1545	345.	85.2	67.0	******	******	******
1600	360.	85.5	66.0	13.10	0.429	20.00
1615	375.	86.0	65.5	******	0.412	******
1630	390.	85.5	65.5	******	******	******
1645	405.	85.0	65.0	******	******	******
1700	420.	85.5	65.0	******	0.410	20.00
1715	435.	86.2	65.0	******	0.400	******
1730	450.	86.2	64.5	******	0.412	******

EC -124
BUTENE-1
1976 MAR 2

BEGIN IRRADIATION 0945, 0.25 INCH PYREX FILTER
CORRECTION FOR DECAY IN K1
HNO3 MONITORED USING MODIFIED MAST, SAMPLING RATE 150 ML/MIN
BECKMAN 6800 GFF CHAMBER C958-1038
GC-MS SAMPLES TAKEN AFTER RUN
CO FACTOR 2.2/1.24, HNO3 EST. 2 PPB/CIV
RADIOMETER CORRECTION -0.017 MW/CM2

T=0 AT 945 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	2

TS	DEG K	AVERAGE	302.6
REL HUM	%	AVERAGE	59.98
SSPOWER	KW	AVERAGE	13.37
RADIOM	MW/CM2	AVERAGE	0.401
H2O	PPM	AVERAGE	2.442E 04
NO	PPM	INIT COND	0.608
NO2-CORR	PPM	INIT COND	0.385
CO	PPM	INIT COND	1.872
HNO3	PPM	INIT COND	0.004
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002
1-C4=	PPM	INIT COND	0.424

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.705
430.	1.721
403.	1.555
380.	1.403
370.	1.288
360.	1.166
350.	1.000
340.	0.772
330.	0.519
320.	0.304
310.	0.129
300.	0.045
290.	0.0

K1=0.27 MIN-1

SAMPLING RATE = 1.906 L/MIN

68 GC SAMPLES TAKEN

EC -124
BUTENE-1
1976 MAR 2

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	1-C4= PPM
945	0.	0.0	0.608	0.385	0.996	0.424
1000	15.	0.0	0.572	0.402	0.976	0.389
1015	30.	0.0	0.540	0.426	0.968	0.355
1030	45.	0.002	0.508	0.439	0.945	0.332
1045	60.	0.002	0.479	0.458	0.937	0.306
1100	75.	0.005	0.442	0.476	0.918	0.276
1115	90.	0.007	0.413	0.486	0.899	0.258
1130	105.	0.007	0.383	0.497	0.880	0.237
1145	120.	0.010	0.362	0.507	0.864	0.213
1200	135.	0.012	0.327	0.515	0.842	0.203
1215	150.	0.015	0.303	0.525	0.828	0.181
1230	165.	0.015	0.278	0.528	0.807	0.165
1245	180.	0.020	0.259	0.532	0.791	0.156
1300	195.	0.022	0.237	0.534	0.770	0.143
1315	210.	0.024	0.215	0.535	0.748	0.112
1330	225.	0.032	0.200	0.530	0.728	0.117
1345	240.	0.037	0.188	0.523	0.711	0.108
1400	255.	0.039	0.166	0.523	0.685	0.095
1415	270.	0.044	0.154	0.519	0.673	0.086
1430	285.	0.054	0.139	0.514	0.656	0.080
1445	300.	0.056	0.129	0.507	0.637	0.071
1500	315.	0.061	0.120	0.500	0.618	0.065
1515	330.	0.068	0.103	0.501	0.604	0.062
1530	345.	0.076	0.100	0.484	0.584	0.056
1545	360.	0.083	0.090	0.475	0.565	0.050
1600	375.	0.090	0.083	0.465	0.545	0.044
1615	390.	0.103	0.078	0.447	0.527	0.040
1630	405.	0.103	0.066	0.447	0.513	0.036
1645	420.	0.117	0.064	0.430	0.493	0.033
1700	435.	0.125	0.059	0.413	0.474	0.028
1715	450.	0.129	0.051	0.409	0.460	0.026
1730	465.	0.142	0.049	0.398	0.446	0.023
1745	480.	0.149	0.042	0.386	0.428	0.019
1800	495.	0.159	0.042	0.370	0.414	0.017
1815	510.	0.166	0.034	0.365	0.399	0.015
1830	525.	0.178	0.034	0.352	0.384	0.014
1845	540.	0.188	0.032	0.336	0.368	0.012
1900	555.	0.193	0.029	0.324	0.351	0.010
1915	570.	0.208	0.029	0.310	0.337	0.009
1930	585.	0.217	0.024	0.299	0.323	0.008
1945	600.	0.227	0.022	0.288	0.310	0.007
2000	615.	0.237	0.022	0.270	0.294	0.006
2015	630.	0.247	0.022	0.259	0.278	0.005

EC -124
BUTENE-1
1976 MAR 2

CLOCK TIME	ELAPSED T(MIN)	CO PPM	HNO3 PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	BUOX PPM	ME-N PPM	C2-N PPM
945	0.	1.67	0.004	0.000	0.000	0.0	0.0010	0.0002	0.0023	0.0002	0.0	0.0	0.0
1000	15.	1.88	0.003	******	******	******	******	******	******	******	0.0000	******	******
1015	30.	******	0.001	0.001	0.001	******	0.0037	0.0417	0.0050	0.0013	******	0.0	0.0
1030	45.	******	0.001	******	******	******	******	******	******	******	0.0014	******	******
1045	60.	1.94	0.003	0.001	0.003	0.068	0.0085	0.0698	0.0045	0.0020	******	0.0	0.0
1100	75.	1.94	0.003	******	******	******	******	******	******	******	0.0026	******	******
1115	90.	1.93	0.003	0.001	0.006	******	0.0141	0.0893	0.0069	0.0029	******	0.0	0.0004
1130	105.	1.98	0.003	******	******	******	******	******	******	******	0.0038	******	******
1145	120.	2.01	0.003	0.002	0.008	0.079	0.0214	0.1070	0.0097	0.0035	******	0.0	0.0003
1200	135.	1.98	0.002	******	******	******	******	******	******	******	0.0049	******	******
1215	150.	2.03	0.0	0.003	0.012	******	0.0295	0.1110	0.0096	0.0037	******	0.0	0.0006
1230	165.	2.05	0.002	******	******	******	******	******	******	******	0.0055	******	******
1245	180.	2.04	0.004	0.004	0.013	0.125	0.0349	0.1190	0.0128	0.0041	0.0064	0.0001	0.0006
1300	195.	2.09	0.003	******	******	******	******	******	******	******	******	******	******
1315	210.	2.11	0.006	0.005	0.018	******	0.0415	0.1190	0.0116	0.0041	0.0070	0.0003	0.0008
1330	225.	2.16	0.006	******	******	******	******	******	******	******	******	******	******
1345	240.	2.15	0.004	0.007	0.021	0.161	0.0466	0.1170	0.0122	0.0041	0.0073	0.0003	0.0010
1400	255.	2.18	0.003	******	******	******	******	******	******	******	******	******	******
1415	270.	2.18	0.003	0.009	0.023	******	0.0499	0.1130	0.0160	0.0038	0.0077	0.0003	0.0011
1430	285.	2.24	0.002	******	******	******	******	******	******	******	******	******	******
1445	300.	2.26	0.002	0.011	0.025	0.127	0.0565	0.1110	0.0192	0.0038	0.0077	0.0006	0.0014
1500	315.	2.26	0.005	******	******	******	******	******	******	******	******	******	******
1515	330.	2.30	0.004	0.013	0.026	******	0.0613	0.1080	0.0229	0.0035	0.0082	0.0006	0.0014
1530	345.	2.30	0.004	******	******	******	******	******	******	******	******	******	******
1545	360.	2.34	0.008	0.015	0.028	0.157	0.0645	0.1030	0.0270	0.0034	0.0084	0.0008	0.0018
1600	375.	2.36	0.006	******	******	******	******	******	******	******	******	******	******
1615	390.	2.37	0.004	0.018	0.031	******	0.0669	0.0968	0.0305	0.0031	0.0085	0.0010	0.0020
1630	405.	2.42	0.007	******	******	******	******	******	******	******	******	******	******
1645	420.	2.45	0.008	0.020	0.033	0.145	0.0680	0.0913	0.0318	0.0029	0.0087	0.0011	0.0020
1700	435.	2.46	0.008	******	******	******	******	******	******	******	******	******	******
1715	450.	2.50	******	******	0.034	******	0.0704	0.0819	0.0281	0.0027	0.0084	0.0013	0.0021
1730	465.	2.53	0.010	******	******	******	******	******	******	******	******	******	******
1745	480.	2.57	0.011	0.025	0.035	0.131	0.0731	0.0773	0.0322	0.0025	0.0084	0.0013	0.0021
1800	495.	2.49	0.010	******	******	******	******	******	******	******	******	******	******
1815	510.	2.58	0.009	0.028	0.036	******	0.0653	0.0640	0.0348	0.0021	0.0077	0.0014	0.0022
1830	525.	2.67	0.009	******	******	******	******	******	******	******	******	******	******
1845	540.	2.58	0.010	0.030	0.036	0.123	0.0720	0.0645	0.0428	0.0021	0.0084	0.0014	0.0022
1900	555.	2.67	0.011	******	******	******	******	******	******	******	******	******	******
1915	570.	2.67	0.010	0.033	0.036	******	0.0699	0.0576	0.0417	0.0019	0.0079	0.0015	0.0022
1930	585.	2.73	0.011	******	******	******	******	******	******	******	******	******	******
1945	600.	2.70	0.013	0.036	0.036	0.115	0.0700	0.0516	0.0607	0.0017	0.0079	0.0017	0.0024
2000	615.	2.76	0.010	******	******	******	******	******	******	******	******	******	******
2015	630.	2.73	0.008	0.038	0.036	******	******	******	******	******	******	0.0017	0.0025

EC -124
BUTENE-1
1976 MAR 2

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	******	45.0	13.20	******	20.00
1000	15.	84.8	45.0	******	******	******
1015	30.	83.3	47.5	******	******	******
1030	45.	84.3	52.5	******	******	******
1045	60.	83.3	56.5	******	0.406	20.00
1100	75.	84.3	60.5	******	******	******
1115	90.	84.3	62.0	******	******	******
1130	105.	84.8	63.5	******	******	******
1145	120.	83.8	63.5	******	0.398	20.00
1200	135.	83.5	63.0	******	******	******
1215	150.	84.0	63.0	******	******	******
1230	165.	84.5	63.0	******	******	******
1245	180.	84.5	63.0	******	0.406	20.00
1300	195.	83.5	62.5	******	******	******
1315	210.	83.5	63.5	******	******	******
1330	225.	84.3	63.0	******	******	******
1345	240.	85.2	62.5	******	******	20.00
1400	255.	84.8	62.5	13.20	******	******
1415	270.	84.5	62.0	******	******	******
1430	285.	84.8	61.5	******	******	******
1445	300.	85.0	61.0	******	0.408	20.00
1500	315.	85.7	61.0	******	0.391	******
1515	330.	85.5	60.5	******	0.393	******
1530	345.	86.0	61.0	******	0.401	******
1545	360.	85.2	60.5	13.50	0.403	20.00
1600	375.	85.7	60.5	******	******	******
1615	390.	86.0	60.5	******	******	******
1630	405.	85.7	60.5	******	******	******
1645	420.	85.7	61.0	******	0.415	20.00
1700	435.	86.2	60.5	******	0.398	******
1715	450.	86.0	60.0	13.40	0.396	******
1730	465.	86.7	60.0	******	0.406	******
1745	480.	86.2	60.0	13.30	0.396	20.00
1800	495.	86.2	60.5	13.40	******	******
1815	510.	86.0	60.5	******	******	******
1830	525.	86.2	60.5	******	******	******
1845	540.	86.0	60.0	13.50	0.403	20.00
1900	555.	86.2	60.5	******	******	******
1915	570.	86.0	60.5	******	******	******
1930	585.	86.5	60.0	******	******	******
1945	600.	87.0	60.0	13.50	0.418	20.00
2000	615.	86.7	59.5	******	0.398	******
2015	630.	85.7	59.5	******	0.396	******

EC -142
ETHENE
1976 APR 1

BEGIN IRRADIATION 0915, 0.25 INCH PYREX FILTER
PROPALD,ACETONE,ETOX,GACETALD MONITORED BY 3-PART COLUMN
CO FACTOR 2.2/1.24,
RADIOMETER CORRECTION -0.013 MW/CM2

T=0 AT 915 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	63.37
SSPOWER	KW	AVERAGE	15.89
RADIOM	MW/CM2	AVERAGE	0.486
H2O	PPM	AVERAGE	2.634E 04
NO	PPM	INIT COND	0.322
NO2-CORR	PPM	INIT COND	0.158
CO	PPM	INIT COND	2.262
HCHO	PPM	INIT COND	0.050
ACETALD	PPM	INIT COND	0.005
ACETONE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.949

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.195
430.	1.942
403.	1.785
380.	1.553
370.	1.396
360.	1.196
350.	1.000
340.	0.722
330.	0.474
320.	0.251
310.	0.089
300.	0.019
290.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 1.715 L/MIN

42 GC SAMPLES TAKEN

EC -142
ETHENE
1976 APR 1

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	ETOX PPM
915	0.	0.0	0.322	0.158	0.480	0.949	2.26	0.000	0.050	0.0049	0.0004	0.0053	0.0002	0.0
930	15.	0.0	0.280	0.191	0.471	0.914	2.23	******	******	******	******	******	******	******
945	30.	0.010	0.227	0.222	0.450	0.870	2.23	0.000	******	0.0049	0.0005	0.0079	0.0003	0.0
1000	45.	0.020	0.177	0.260	0.438	0.839	2.24	******	******	******	******	******	******	******
1015	60.	0.034	0.143	0.279	0.422	0.807	2.29	0.001	0.068	0.0056	0.0008	0.0065	******	0.0002
1030	75.	0.054	0.111	0.255	0.406	0.775	2.30	******	******	******	******	******	******	******
1045	90.	0.078	0.092	0.256	0.390	0.748	2.33	0.001	******	0.0066	0.0012	0.0114	******	0.0002
1100	105.	0.100	0.070	0.303	0.374	0.717	2.38	******	******	******	******	******	******	******
1115	120.	0.132	0.060	0.298	0.357	0.689	2.47	0.002	0.111	0.0071	0.0017	0.0140	0.0004	0.0002
1130	135.	0.166	0.050	0.288	0.338	0.655	2.49	******	******	******	******	******	******	******
1145	150.	0.203	0.042	0.276	0.318	0.628	2.54	0.002	******	0.0086	0.0027	0.0194	******	0.0003
1200	165.	0.239	0.034	0.264	0.299	0.593	2.53	******	******	******	******	******	******	******
1215	180.	0.288	0.027	0.250	0.277	0.566	2.57	0.003	0.161	0.0096	0.0036	0.0225	******	0.0003
1230	195.	0.327	0.022	0.232	0.255	0.534	2.66	******	******	******	******	******	******	******
1245	210.	0.376	0.020	0.210	0.229	0.500	2.67	0.004	******	0.0110	0.0047	0.0259	******	0.0004
1300	225.	0.427	0.016	0.190	0.206	0.469	2.72	******	******	******	******	******	******	******
1315	240.	0.489	0.012	0.168	0.182	0.430	2.80	0.005	0.191	0.0113	0.0056	0.0263	0.0011	0.0004
1330	255.	0.542	0.011	0.146	0.157	0.395	2.83	******	******	******	******	******	******	******
1345	270.	0.598	0.013	0.118	0.131	0.357	2.89	0.007	******	0.0120	0.0069	0.0323	******	0.0004
1400	285.	0.652	0.009	0.102	0.109	0.328	2.93	******	******	******	******	******	******	******
1415	300.	0.699	0.009	0.083	0.093	0.298	2.99	0.009	0.207	0.0130	0.0077	0.0373	******	******
1430	315.	0.733	0.007	0.067	0.076	0.267	3.04	******	******	******	******	******	******	******
1445	330.	0.760	0.007	0.055	0.063	0.245	3.11	0.010	******	0.0134	0.0082	0.0394	******	******
1500	345.	0.772	0.010	0.044	0.056	0.223	3.18	******	******	******	******	******	******	******
1515	360.	0.782	0.010	0.038	0.047	0.203	3.20	0.012	0.177	0.0137	0.0083	0.0432	0.0037	0.0006

EC -142
ETHENE
1976 APR 1

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
915	0.	83.0	61.5	******	******	20.00
930	15.	88.4	61.0	******	0.490	******
945	30.	85.0	62.5	15.90	0.485	******
1000	45.	85.2	64.0	******	0.480	******
1015	60.	85.5	65.0	16.00	0.502	20.00
1030	75.	85.5	65.0	******	******	******
1045	90.	84.8	65.5	******	******	******
1100	105.	85.5	65.5	******	******	******
1115	120.	85.5	66.0	15.80	0.480	20.00
1130	135.	86.0	65.5	******	0.490	******
1145	150.	85.7	65.5	******	******	******
1200	165.	86.0	65.5	******	******	******
1215	180.	86.2	66.0	16.00	0.471	20.00
1230	195.	86.2	65.0	******	******	******
1245	210.	86.0	64.5	******	******	******
1300	225.	86.5	64.5	******	******	******
1315	240.	86.2	64.0	15.90	0.485	20.00
1330	255.	86.0	64.0	******	******	******
1345	270.	85.2	64.0	******	******	******
1400	285.	85.5	63.5	******	0.483	******
1415	300.	85.5	63.5	15.70	0.473	20.00
1430	315.	86.0	63.0	******	0.478	******
1445	330.	85.2	63.0	******	0.488	******
1500	345.	85.2	63.0	******	0.473	******
1515	360.	85.7	63.0	15.90	0.478	20.00

EC -143
ETHENE
1976 APR12

BEGIN IRRADIATION 0915, 0.25 INCH PYREX FILTER
PROPALD,ACETONE,ETOX,&ACETALD MONITORED BY 3-PART COLUMN
CO FACTOR 2.2/1.20
RADIOMETER CORRECTION -0.012 MW/CM2

T=0 AT 915 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	302.1
REL HUM	%	AVERAGE	57.94
SSPOWER	KW	AVERAGE	15.83
RADIOM	MW/CM2	AVERAGE	0.481
H2O	PPM	AVERAGE	2.285E 04
NO	PPM	INIT COND	0.390
NO2-CORR	PPM	INIT COND	0.110
CO	PPM	INIT COND	2.123
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.003
ETHENE	PPM	INIT COND	2.027

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.167
430.	1.936
403.	1.787
380.	1.539
370.	1.373
360.	1.202
350.	1.000
340.	0.720
330.	0.477
320.	0.251
310.	0.090
300.	0.021
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.783 L/MIN

54 GC SAMPLES TAKEN

EC -143
ETHENE
1976 APR12

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	ETOX PPM
915	0.	0.0	0.390	0.110	0.500	2.027	2.12	0.000	0.0	0.0020	0.0003	0.0031	******	0.0001
930	15.	0.002	0.291	0.195	0.487	1.915	2.18	******	******	******	******	******	******	******
945	30.	0.024	0.172	0.295	0.469	1.833	2.14	0.000	******	0.0040	0.0007	0.0063	******	0.0002
1000	45.	0.081	0.092	0.351	0.444	1.751	2.12	******	******	******	******	******	******	******
1015	60.	0.151	0.046	0.375	0.423	1.654	2.25	0.001	0.298	0.0055	0.0019	0.0146	******	0.0002
1030	75.	0.261	0.028	0.360	0.387	1.570	2.26	******	******	******	******	******	******	******
1045	90.	0.396	0.017	0.333	0.352	1.469	2.36	0.001	******	0.0093	0.0047	0.0285	******	0.0003
1100	105.	0.547	0.012	0.291	0.305	1.365	2.43	******	******	******	******	******	******	******
1115	120.	0.706	0.010	0.243	0.252	1.262	2.56	0.003	0.705	0.0113	0.0073	0.0338	0.0028	0.0005
1130	135.	0.843	0.009	0.193	0.202	1.139	2.63	******	******	******	******	******	******	******
1145	150.	0.953	0.009	0.155	0.163	1.046	2.78	0.004	******	0.0137	0.0095	0.0400	******	0.0008
1200	165.	1.021	0.007	0.122	0.128	0.945	2.84	******	******	******	******	******	******	******
1215	180.	1.065	0.007	0.092	0.099	0.864	3.01	0.006	0.937	0.0129	0.0091	0.0425	******	0.0010
1230	195.	1.082	0.007	0.074	0.082	0.803	3.09	******	******	******	******	******	******	******
1245	210.	1.087	0.007	0.062	0.069	0.739	3.24	0.007	******	0.0171	0.0107	0.0419	******	0.0014
1300	225.	1.082	0.007	0.053	0.059	0.690	3.30	******	0.967	******	******	******	******	******
1315	240.	1.065	0.007	0.045	0.052	0.645	3.41	0.008	******	0.0167	0.0103	0.0386	0.0045	0.0016
1330	255.	1.038	0.007	0.038	0.047	0.602	3.52	******	******	******	******	******	******	******
1345	270.	1.016	0.007	0.035	0.041	0.564	3.60	0.009	******	0.0180	0.0099	0.0423	******	0.0016
1400	285.	0.992	0.007	0.032	0.040	0.531	3.72	******	******	******	******	******	******	******
1415	300.	0.962	0.007	0.032	0.038	0.506	3.73	0.009	0.765	0.0161	0.0087	0.0361	******	0.0017
1430	315.	0.933	0.007	0.027	0.036	0.471	3.76	******	******	******	******	******	******	******
1445	330.	0.904	0.007	0.028	0.036	0.444	3.86	0.010	******	0.0187	0.0093	0.0400	******	0.0021
1500	345.	0.877	0.007	0.026	0.033	0.420	3.95	******	******	******	******	******	******	******
1515	360.	0.848	0.007	0.026	0.033	0.402	4.05	0.009	0.695	0.0192	0.0093	0.0423	0.0044	0.0022

EC -143
ETHENE
1976 APR12

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADION MW/CM2	HCHO VOL L
915	0.	84.3	40.5	******	******	20.00
930	15.	85.2	41.0	******	0.477	******
945	30.	84.3	43.5	15.90	0.486	******
1000	45.	83.8	47.5	******	0.484	******
1015	60.	83.0	53.0	15.60	0.479	20.00
1030	75.	84.3	58.5	******	0.479	******
1045	90.	84.0	61.0	******	******	******
1100	105.	84.3	61.0	******	******	******
1115	120.	83.5	61.5	16.10	0.496	20.00
1130	135.	83.3	62.0	******	0.459	******
1145	150.	83.5	61.5	******	******	******
1200	165.	83.5	61.5	******	******	******
1215	180.	83.5	61.5	******	0.464	20.00
1230	195.	84.0	61.0	******	0.469	******
1245	210.	84.0	61.0	******	******	******
1300	225.	84.5	61.0	******	******	20.00
1315	240.	84.5	61.0	16.20	0.511	******
1330	255.	84.3	61.0	******	******	******
1345	270.	84.5	61.0	******	******	******
1400	285.	84.5	60.5	******	******	******
1415	300.	84.8	60.5	15.60	0.479	20.00
1430	315.	84.8	60.5	******	******	******
1445	330.	84.8	60.5	******	******	******
1500	345.	85.0	60.5	******	******	******
1515	360.	85.0	60.5	15.60	0.481	20.00

EC -144
ETHENE + PROPENE
1976 APR15

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER
AT 1515 HOURS ESTIMATE C1-N = 0.5 PPB
ETOX MONITORED BY 3-PART COLUMN
CO FACTOR 2.2/1.24
RADIOMETER CORRECTION -0.005 MW/CM2

T=0 AT 915 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	302.6
REL HUM	%	AVERAGE	60.55
SSPOWER	KW	AVERAGE	15.94
RADIOM	MW/CM2	AVERAGE	0.485
H2O	PPM	AVERAGE	2.468E 04
NO	PPM	INIT COND	0.398
NO2-CORR	PPM	INIT COND	0.111
CO	PPM	INIT COND	2.271
HCHO	PPM	INIT COND	0.020
ACETALD	PPM	INIT COND	0.005
ACETONE	PPM	INIT COND	0.003
ETHENE	PPM	INIT COND	2.027
PROPENE	PPM	INIT COND	0.221

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.245
430.	1.982
403.	1.812
380.	1.560
370.	1.398
360.	1.202
350.	1.000
340.	0.717
330.	0.476
320.	0.250
310.	0.088
300.	0.021
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.762 L/MIN

53 GC SAMPLES TAKEN

EC -144
ETHENE + PROPENE
1976 APR15

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM
915	0.	0.0	0.398	0.111	0.509	2.027	0.221
930	15.	0.007	0.259	0.231	0.490	1.939	0.199
945	30.	0.046	0.120	0.346	0.468	1.852	0.170
1000	45.	0.142	0.060	0.377	0.435	1.770	0.140
1015	60.	0.286	0.029	0.367	0.398	1.682	0.115
1030	75.	0.430	0.016	0.331	0.348	1.594	0.092
1045	90.	0.576	0.012	0.277	0.288	1.464	0.061
1100	105.	0.755	0.010	0.216	0.225	1.356	0.049
1115	120.	0.909	0.007	0.159	0.168	1.249	0.032
1130	135.	0.992	0.007	0.118	0.125	1.141	0.025
1145	150.	1.043	0.006	0.085	0.091	1.044	0.014
1200	165.	1.060	0.007	0.065	0.073	0.970	0.010
1215	180.	1.060	0.007	0.045	0.053	0.886	0.007
1230	195.	1.038	0.007	0.033	0.041	0.829	0.005
1245	210.	1.016	0.006	0.026	0.034	0.776	0.003
1300	225.	0.999	0.006	0.023	0.030	0.738	0.002
1315	240.	0.970	0.006	0.019	0.025	0.692	0.002
1330	255.	0.936	0.007	0.016	0.023	0.657	0.001
1345	270.	0.909	0.006	0.014	0.021	0.623	0.001
1400	285.	0.882	0.006	0.015	0.021	0.588	0.001
1415	300.	0.852	0.006	0.014	0.021	0.552	0.001
1430	315.	0.830	0.006	0.013	0.020	0.529	0.000
1445	330.	0.806	0.006	0.013	0.019	0.501	0.000
1500	345.	0.787	0.006	0.011	0.017	0.477	0.000
1515	360.	0.767	0.006	0.012	0.019	0.453	0.000

EC -144
ETHENE + PROPENE
1976 APR15

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	ETOX PPM	PROX PPM
915	0.	2.27	C.000	0.020	0.0047	0.0002	0.0033	0.0003	******	0.0
930	15.	2.28	******	******	******	******	******	******	******	******
945	30.	2.29	C.002	******	******	0.0009	0.0071	0.0001	0.0	0.0004
1000	45.	2.28	******	******	******	******	******	******	******	******
1015	60.	2.34	C.010	0.363	0.0868	0.0035	0.0304	0.0013	******	0.0009
1030	75.	2.41	******	******	******	******	******	******	******	******
1045	90.	2.48	C.027	******	0.1050	0.0060	0.0369	0.0027	0.0005	0.0013
1100	105.	2.63	******	******	******	******	******	******	******	******
1115	120.	2.73	0.048	0.765	0.1080	0.0083	0.0401	0.0039	******	0.0014
1130	135.	2.80	******	******	******	******	******	******	******	******
1145	150.	2.95	C.062	******	******	******	******	******	0.0012	******
1200	165.	3.04	******	******	******	******	******	******	******	******
1215	180.	3.11	0.071	0.846	0.0944	0.0072	0.0464	0.0042	******	0.0015
1230	195.	3.30	******	******	******	******	******	******	******	******
1245	210.	3.31	C.075	******	******	******	******	******	0.0017	******
1300	225.	3.44	******	******	******	******	******	******	******	******
1315	240.	3.42	0.075	0.705	0.0824	0.0082	0.0394	0.0041	******	0.0012
1330	255.	3.61	******	******	******	******	******	******	******	******
1345	270.	3.66	C.074	******	******	******	******	******	0.0020	******
1400	285.	3.72	******	******	******	******	******	******	******	******
1415	300.	3.77	C.071	0.715	0.0733	0.0068	0.0355	0.0034	******	0.0013
1430	315.	3.92	******	******	******	******	******	******	******	******
1445	330.	3.94	0.069	******	******	******	******	******	0.0021	******
1500	345.	3.97	******	******	******	******	******	******	******	******
1515	360.	4.03	0.067	0.624	0.0660	0.0063	0.0335	0.0031	******	0.0014

EC -144
ETHENE + PROPENE
1976 APR15

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kh	RADICN MH/CM2	HCHO VOL L
915	0.	83.8	50.5	******	0.474	20.00
930	15.	84.8	50.5	******	0.488	******
945	30.	84.3	54.0	******	0.481	******
1000	45.	84.3	59.0	******	0.476	******
1015	60.	84.3	62.5	15.80	0.481	20.00
1030	75.	84.3	63.0	******	0.476	******
1045	90.	84.8	63.5	******	******	******
1100	105.	84.8	63.5	******	******	******
1115	120.	85.0	63.5	16.00	0.496	20.00
1130	135.	84.8	63.0	******	0.457	******
1145	150.	85.5	63.0	******	0.469	******
1200	165.	85.2	63.0	******	0.480	******
1215	180.	85.5	63.0	15.60	0.484	20.00
1230	195.	85.2	63.0	******	0.496	******
1245	210.	85.0	62.5	******	0.486	******
1300	225.	85.0	62.5	******	0.481	******
1315	240.	86.0	62.5	******	0.488	20.00
1330	255.	85.7	62.5	******	0.484	******
1345	270.	86.2	62.5	******	0.486	******
1400	285.	85.7	62.5	******	0.493	******
1415	300.	85.7	62.5	16.40	0.496	20.00
1430	315.	85.5	62.5	******	0.479	******
1445	330.	85.0	62.0	******	0.496	******
1500	345.	85.5	62.0	******	0.501	******
1515	360.	85.5	62.0	15.90	0.481	20.00

EC -145
ETHENE + PROPENE
1976 APR16

BEGIN IRRADIATION 0900, 0.25 INCH PYREX FILTER
ETOX MONITORED BY 3-PART COLUMN
CO FACTOR 2.2/1.22
RADIOMETER CORRECTION -0.005 MW/CM2

T=0 AT 900 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	302.8
REL HUM	%	AVERAGE	60.01
SSPOWER	KW	AVERAGE	16.03
RADIOM	MW/CM2	AVERAGE	0.487
H2O	PPM	AVERAGE	2.456E 04
NO	PPM	INIT COND	0.745
NO2-CORR	PPM	INIT COND	0.246
CO	PPM	INIT COND	2.423
HCHO	PPM	INIT COND	0.004
ACETALD	PPM	INIT COND	0.003
PROPALD	PPM	INIT COND	0.000
ACETONE	PPM	INIT COND	0.003
ETHENE	PPM	INIT COND	1.049
PROPENE	PPM	INIT COND	0.428

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.177
430.	1.938
403.	1.794
380.	1.550
370.	1.386
360.	1.195
350.	1.000
340.	0.715
330.	0.469
320.	0.247
310.	0.092
300.	0.024
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.798 L/MIN

76 GC SAMPLES TAKEN

EC -145
ETHENE + PROPENE
1976 APR16

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM
900	0.	0.0	0.745	0.246	0.994	1.049	0.428
915	15.	0.0	0.660	0.322	0.981	1.005	0.402
930	30.	0.0	0.559	0.392	0.957	0.973	0.361
945	45.	0.0	0.459	0.469	0.930	0.933	0.311
1000	60.	0.005	0.379	0.531	0.909	0.906	0.283
1015	75.	0.012	0.305	0.569	0.875	0.867	0.257
1030	90.	0.022	0.247	0.601	0.848	0.845	0.237
1045	105.	0.042	0.195	0.629	0.819	0.813	0.208
1100	120.	0.061	0.156	0.635	0.791	0.788	0.190
1115	135.	0.088	0.122	0.625	0.747	0.759	0.169
1130	150.	0.117	0.098	0.617	0.715	0.739	0.145
1145	165.	0.151	0.081	0.608	0.686	0.708	0.131
1200	180.	0.183	0.059	0.589	0.653	0.688	0.112
1215	195.	0.225	0.051	0.557	0.608	0.657	0.093
1230	210.	0.266	0.042	0.529	0.568	0.633	0.076
1245	225.	0.305	0.034	0.493	0.527	0.604	0.064
1300	240.	0.349	0.027	0.461	0.485	0.570	0.054
1315	255.	0.396	0.022	0.415	0.437	0.546	0.043
1330	270.	0.445	0.020	0.371	0.391	0.518	0.035
1345	285.	0.498	0.015	0.329	0.346	0.486	0.026
1400	300.	0.550	0.012	0.287	0.301	0.458	0.021
1415	315.	0.606	0.012	0.246	0.258	0.427	0.015
1430	330.	0.667	0.010	0.198	0.207	0.396	0.011
1445	345.	0.725	0.007	0.159	0.168	0.361	0.007
1500	360.	0.777	0.010	0.122	0.132	0.330	0.005

EC -145
ETHENE + PROPENE
1976 APR16

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	ETOX PPM	PROX PPM	ME-N PPM
900	0.	2.42	0.000	0.004	0.003	0.0005	0.0027	0.0	0.0000	0.0
915	15.	2.33	******	******	******	******	******	******	******	******
930	30.	2.40	0.001	******	******	******	******	0.0	******	0.0
945	45.	2.36	******	******	******	******	******	******	******	******
1000	60.	2.36	0.004	0.161	0.057	0.0020	0.0045	******	0.0024	0.0
1015	75.	2.35	******	******	******	******	******	******	******	******
1030	90.	2.50	0.009	******	******	******	******	0.0	******	0.0007
1045	105.	2.44	******	******	******	******	******	******	******	******
1100	120.	2.54	0.017	0.264	0.160	0.0036	0.0075	******	0.0045	0.0009
1115	135.	2.64	******	******	******	******	******	******	******	******
1130	150.	2.63	0.026	******	******	******	******	0.0	******	0.0012
1145	165.	2.68	******	******	******	******	******	******	******	******
1200	180.	2.73	0.029	0.369	0.174	0.0047	0.0113	******	0.0056	0.0010
1215	195.	2.75	******	******	******	******	******	******	******	******
1230	210.	2.90	0.046	******	******	******	******	0.0	******	0.0018
1245	225.	2.91	******	******	******	******	******	******	******	******
1300	240.	2.95	0.055	0.516	0.165	0.0055	0.0122	******	0.0060	0.0020
1315	255.	3.06	******	******	******	******	******	******	******	******
1330	270.	3.06	0.068	******	******	******	******	0.0	******	0.0022
1345	285.	3.18	******	******	******	******	******	******	******	******
1400	300.	3.17	0.079	0.453	0.149	0.0064	0.0154	******	0.0070	0.0026
1415	315.	3.27	******	******	******	******	******	******	******	******
1430	330.	3.34	0.098	******	******	******	******	0.0008	******	0.0028
1445	345.	3.44	******	******	******	******	******	******	******	******
1500	360.	3.51	0.112	0.499	0.103	0.0068	0.0197	0.0010	0.0061	0.0030

EC -145
ETHENE + PROPENE
1976 APR16

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADION MW/CM2	HCHO VOL L
900	0.	80.8	49.0	******	******	20.00
915	15.	88.9	49.0	******	0.476	******
930	30.	87.2	50.0	16.20	0.496	******
945	45.	85.2	53.0	******	0.506	******
1000	60.	85.0	57.0	******	0.498	20.00
1015	75.	85.0	60.5	******	0.484	******
1030	90.	85.0	62.0	******	******	******
1045	105.	85.2	62.5	******	******	******
1100	120.	85.7	62.5	16.10	0.498	20.00
1115	135.	85.2	62.5	******	0.484	******
1130	150.	85.2	62.5	******	0.488	******
1145	165.	85.2	62.0	******	0.484	******
1200	180.	85.5	62.5	16.10	0.486	20.00
1215	195.	85.0	62.0	******	0.486	******
1230	210.	85.7	62.0	******	******	******
1245	225.	85.0	62.0	******	******	******
1300	240.	85.2	62.0	15.90	0.484	20.00
1315	255.	85.0	62.0	******	0.479	******
1330	270.	85.2	62.0	******	******	******
1345	285.	85.5	61.5	******	******	******
1400	300.	85.7	61.5	15.90	0.486	20.00
1415	315.	85.0	61.5	******	0.488	******
1430	330.	85.2	61.5	******	******	******
1445	345.	85.0	61.5	******	******	******
1500	360.	85.5	61.5	16.00	0.493	20.00

EC -146
TRANS-2-BUTENE
1976 APR 12

BEGIN IRRADIATION 0915, 0.25 INCH PYREX FILTER
CO FACTOR 2.2/1.27
RADIOMETER CORRECTION -0.020 MW/CM2

T=0 AT 915 PST

	CALIB#
PAN	9
REL HUM	2
NEMO	1
REL INT	3

TS	DEG K	AVERAGE	302.9
REL HUM	%	AVERAGE	69.36
SSPUMER	KM	AVERAGE	16.58
RADIUM	MW/CM2	AVERAGE	0.430
H2O	PPM	AVERAGE	2.694E 04
NO	PPM	INIT COND	3.385
NO2-CORR	PPM	INIT COND	0.124
T2-C4=	PPM	INIT COND	0.231
CO	PPM	INIT COND	2.116
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:	WAVELENGTH(NM)	REL. INTENSITY
	500.	1.682
	490.	1.859
	480.	1.712
	380.	1.554
	370.	1.401
	360.	1.217
	350.	1.000
	340.	0.741
	330.	0.499
	320.	0.266
	310.	0.089
	300.	0.023
	290.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 1.782 L/MIN

53 GC SAMPLES TAKEN

EC -146
TRANS-2-BUTENE
1976 APR 12

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	T2-C4= PPM
915	0.	0.0	0.385	0.124	0.510	0.231
930	15.	0.005	0.267	0.223	0.485	0.146
945	30.	0.024	0.167	0.273	0.460	0.087
1000	45.	0.042	0.143	0.289	0.433	0.046
1015	60.	0.051	0.111	0.297	0.409	0.025
1030	75.	0.071	0.100	0.291	0.388	0.014
1045	90.	0.078	0.081	0.288	0.370	0.007
1100	105.	0.090	0.083	0.271	0.355	0.004
1115	120.	0.098	0.074	0.266	0.341	0.002
1130	135.	0.098	0.067	0.259	0.327	0.001
1145	150.	0.120	0.064	0.248	0.314	0.001
1200	165.	0.125	0.055	0.248	0.303	0.001
1215	180.	0.137	0.053	0.239	0.293	0.001
1230	195.	0.147	0.049	0.230	0.280	0.001
1245	210.	0.161	0.043	0.223	0.268	0.001
1300	225.	0.166	0.042	0.217	0.259	0.001
1315	240.	0.173	0.040	0.207	0.247	0.000
1330	255.	0.183	0.035	0.198	0.234	0.001
1345	270.	0.193	0.034	0.190	0.226	0.001
1400	285.	0.198	0.031	0.183	0.215	0.000
1415	300.	******	0.031	0.174	0.205	0.001
1430	315.	0.217	0.029	0.163	0.194	0.000
1445	330.	0.227	0.026	0.156	0.184	0.000
1500	345.	0.232	0.024	0.151	0.177	0.001
1515	360.	0.239	0.024	0.141	0.166	0.000

EC -140
TRANS-2-BUTENE
1970 APR 12

CLOCK TIME	ELAPSED TIMIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM
915	0.	2.12	0.000	0.0	0.002	0.0002	0.0024	0.0002	0.0001	0.0
930	15.	2.08	******	******	******	******	******	******	******	******
945	30.	2.10	0.011	******	0.176	0.0004	0.0044	0.0002	0.0010	0.0
1000	45.	2.07	******	******	******	******	******	******	******	******
1015	60.	2.09	0.029	0.0	0.202	0.0008	0.0056	0.0004	0.0014	0.0008
1030	75.	2.15	******	******	******	******	******	******	******	******
1045	90.	2.19	0.038	******	0.204	0.0008	0.0060	0.0004	0.0014	0.0011
1100	105.	2.18	******	******	******	******	******	******	******	******
1115	120.	2.22	0.045	0.030	0.199	0.0012	0.0084	0.0007	0.0017	0.0012
1130	135.	2.20	******	******	******	******	******	******	******	******
1145	150.	2.25	0.050	******	0.176	0.0013	0.0086	0.0006	0.0015	0.0015
1200	165.	2.20	******	******	******	******	******	******	******	******
1215	180.	2.28	0.052	0.012	0.146	0.0014	0.0084	0.0006	0.0015	0.0013
1230	195.	2.24	******	******	******	******	******	******	******	******
1245	210.	2.31	0.055	******	0.136	0.0016	0.0072	0.0009	0.0014	0.0016
1300	225.	2.32	******	******	******	******	******	******	******	******
1315	240.	2.44	0.056	0.022	0.130	0.0020	0.0108	0.0010	0.0015	0.0019
1330	255.	2.45	******	******	******	******	******	******	******	******
1345	270.	2.42	0.059	******	0.113	0.0024	0.0104	0.0010	0.0012	0.0019
1400	285.	2.40	******	******	******	******	******	******	******	******
1415	300.	2.44	0.061	0.020	0.105	0.0025	0.0129	0.0012	0.0015	0.0019
1430	315.	2.49	******	******	******	******	******	******	******	******
1445	330.	2.48	0.063	******	0.092	0.0025	0.0110	0.0012	0.0013	0.0022
1500	345.	2.51	******	******	******	******	******	******	******	******
1515	360.	2.53	0.062	0.008	0.081	0.0028	0.0137	0.0013	0.0015	0.0022

EC -146
TRANS-2-BUTENE
1976 APR 12

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	S.POWER KW	RADIOM MW/CM2	MCHO VOL L
915	0.	81.3	62.5	******	******	20.00
930	15.	84.3	61.5	******	0.481	******
945	30.	83.5	63.0	16.50	0.469	******
1000	45.	84.3	64.5	******	0.454	******
1015	60.	84.5	65.5	16.80	0.471	20.00
1030	75.	85.0	66.0	******	******	******
1045	90.	85.2	66.5	******	******	******
1100	105.	85.5	66.5	******	******	******
1115	120.	85.7	66.0	******	0.493	20.00
1130	135.	86.2	66.5	******	******	******
1145	150.	86.2	65.5	******	******	******
1200	165.	86.0	66.0	******	******	******
1215	180.	86.2	66.0	16.80	0.495	20.00
1230	195.	86.5	66.0	******	0.491	******
1245	210.	86.2	66.0	******	******	******
1300	225.	86.0	66.0	******	0.495	******
1315	240.	86.0	66.5	16.50	0.483	20.00
1330	255.	86.0	65.5	******	******	******
1345	270.	85.5	65.5	******	******	******
1400	285.	85.5	65.0	******	******	******
1415	300.	85.5	65.0	******	******	20.00
1430	315.	85.7	65.0	******	******	******
1445	330.	86.0	65.0	******	******	******
1500	345.	86.0	64.5	******	0.458	******
1515	360.	85.7	65.0	16.50	0.488	20.00

EC -147
TRANS-2-BUTENE
1970 APR 13

BEGIN IRRADIATION 0830, 0.25 INCH PYREX FILTER
CO FACTOR 2.2/1.23
RADIOMETER CORRECTION -0.017 MW/CM2

T=0 AT 830 PST

	CALIB
PAN	9
REL HUM	3
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	302.2
REL HUM	%	AVERAGE	63.30
SSPOWER	KW	AVERAGE	16.45
RADIOM	MW/CM2	AVERAGE	0.492
H2O	PPM	AVERAGE	2.670E 04
NO	PPM	INIT COND	0.762
NO2-CORR	PPM	INIT COND	0.200
T2-C4=	PPM	INIT COND	0.417
CO	PPM	INIT COND	2.080
HCHO	PPM	INIT COND	0.010
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.524
430.	2.122
403.	1.916
380.	1.601
370.	1.426
360.	1.208
350.	1.000
340.	0.707
330.	0.436
320.	0.236
310.	0.078
300.	0.014
290.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 1.784 L/MIN

56 GC SAMPLES TAKEN

EC -147
TRANS-2-BUTENE
1976 APR 13

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOx-CORR PPM	T2-C4= PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM
830	0.	0.0	0.782	0.200	0.982	0.417	2.08	0.000	0.010	0.002	0.0025	0.0002	0.0002	0.0
845	15.	0.0	0.596	0.351	0.950	0.291	2.04	0.003	******	******	******	******	******	0.0
900	30.	0.005	0.452	0.467	0.916	0.188	2.05	0.010	******	0.256	0.0069	0.0002	0.0032	0.0
915	45.	0.012	0.352	0.521	0.872	0.116	2.07	******	******	******	******	******	******	******
930	60.	0.020	0.286	0.545	0.836	0.069	2.15	0.027	0.036	0.383	0.0124	******	0.0050	0.0010
945	75.	0.027	0.244	0.554	0.801	0.042	2.12	******	******	******	******	******	******	******
1000	90.	0.034	0.215	0.556	0.771	0.025	2.20	0.042	******	0.369	0.0135	0.0002	0.0056	0.0027
1015	105.	0.042	0.195	0.548	0.746	0.016	2.18	******	******	******	******	******	******	******
1030	120.	0.042	0.176	0.549	0.720	0.009	2.24	0.049	0.062	0.347	0.0133	0.0002	0.0054	0.0035
1045	135.	******	0.161	0.534	0.698	0.005	2.25	******	******	******	******	******	******	******
1100	150.	******	0.149	0.527	0.679	0.003	2.26	0.053	******	0.335	0.0142	0.0003	0.0061	0.0033
1115	165.	0.064	0.139	0.521	0.660	0.002	2.31	******	******	******	******	******	******	******
1130	180.	0.071	0.132	0.509	0.643	0.002	2.31	0.056	0.070	0.311	0.0164	0.0003	0.0060	0.0040
1145	195.	0.081	0.122	0.499	0.621	0.001	2.35	******	******	******	******	******	******	******
1200	210.	0.083	0.117	0.491	0.608	0.001	2.44	0.056	******	0.278	0.0140	0.0005	0.0057	0.0040
1215	225.	0.090	0.107	0.483	0.588	0.001	2.40	******	******	******	******	******	******	******
1230	240.	0.100	0.100	0.475	0.572	0.001	2.44	0.058	0.083	0.242	0.0123	0.0002	0.0050	0.0032
1245	255.	0.105	0.088	0.466	0.554	0.001	2.43	******	******	******	******	******	******	******
1300	270.	0.107	0.088	0.453	0.539	0.001	2.40	0.059	******	0.221	0.0120	0.0006	0.0051	0.0038
1315	285.	0.105	0.078	0.453	0.524	0.001	2.49	******	******	******	******	******	******	******
1330	300.	0.125	0.073	0.435	0.511	0.001	2.58	0.059	0.075	0.213	0.0147	0.0007	0.0054	0.0030
1345	315.	0.127	0.071	0.423	0.496	0.001	2.52	******	******	******	******	******	******	******
1400	330.	******	******	******	******	0.001	******	0.059	******	0.190	0.0195	0.0007	0.0057	0.0060
1415	345.	0.139	0.061	0.403	0.464	0.001	2.63	******	******	******	******	******	******	******
1430	360.	0.154	0.056	0.388	0.447	0.001	2.65	0.060	0.081	0.168	0.0123	0.0006	0.0047	0.0062

EC -147
TRANS-2-BUTENE
1976 APR 13

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
830	0.	82.8	******	******	0.479	20.00
845	15.	85.0	49.5	16.30	0.491	******
900	30.	84.8	51.5	******	0.476	******
915	45.	83.5	53.5	******	0.491	******
930	60.	84.0	54.0	16.60	0.486	20.00
945	75.	85.7	54.0	******	******	******
1000	90.	86.2	54.0	******	******	******
1015	105.	85.7	54.0	******	******	******
1030	120.	86.0	54.0	16.60	0.501	20.00
1045	135.	86.0	54.0	******	******	******
1100	150.	85.7	54.0	******	******	******
1115	165.	85.5	54.0	******	0.503	******
1130	180.	86.0	54.0	16.50	0.496	20.00
1145	195.	87.0	54.0	******	******	******
1200	210.	87.9	54.0	******	******	******
1215	225.	85.7	54.0	******	******	******
1230	240.	86.5	54.0	16.50	0.501	20.00
1245	255.	87.0	54.0	******	******	******
1300	270.	87.4	54.0	******	******	******
1315	285.	86.0	54.0	******	0.484	******
1330	300.	86.2	54.0	16.20	0.484	20.00
1345	315.	87.0	54.0	******	0.481	******
1400	330.	******	******	******	******	******
1415	345.	85.7	53.5	******	0.456	******
1430	360.	86.2	53.5	******	0.490	20.00

EC -149
PROPENE + TRANS-2-BUTENE
1976 APR 16

BEGIN IRRADIATION 0945, 0.25 INCH PYREX FILTER
CO FACTOR 2.2/1.21
RADIOMETER CORRECTION -0.009 MW/CM2

T=0 AT 945 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	63.62
SSPOWER	KW	AVERAGE	16.35
RADIOM	MW/CM2	AVERAGE	0.475
H2O	PPM	AVERAGE	2.650E 04
NO	PPM	INIT COND	0.813
NO2-CORR	PPM	INIT COND	0.176
CO	PPM	INIT COND	2.096
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.004
PROPENE	PPM	INIT COND	0.284
T2-C4=	PPM	INIT COND	0.209

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.532
430.	2.104
403.	1.928
360.	1.618
370.	1.411
360.	1.216
350.	1.000
340.	0.698
330.	0.453
320.	0.236
310.	0.083
300.	0.019
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.779 L/MIN

49 GC SAMPLES TAKEN

EC -149
PROPENE + TRANS-2-BUTENE
1976 APR 16

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	T2-C4= PPM
945	0.	0.0	0.813	0.176	0.989	0.384	0.209
1000	15.	0.0	0.596	0.355	0.949	0.334	0.139
1015	30.	0.005	0.440	0.479	0.916	0.295	0.093
1030	45.	0.015	0.320	0.536	0.864	******	******
1045	60.	0.029	0.249	0.577	0.829	0.217	0.033
1100	75.	0.039	0.198	0.585	0.786	0.192	0.017
1115	90.	0.050	0.169	0.582	0.753	0.173	0.009
1130	105.	0.066	0.139	0.575	0.716	0.154	0.005
1145	120.	0.076	0.127	0.558	0.685	0.140	0.003
1200	135.	0.093	0.112	0.542	0.660	0.133	0.001
1215	150.	0.103	0.098	0.534	0.634	0.115	0.001
1230	165.	0.115	0.090	0.518	0.608	0.100	0.001
1245	180.	0.129	0.083	0.494	0.582	0.087	0.001
1300	195.	0.132	0.066	0.489	0.560	0.081	0.001
1315	210.	0.149	0.064	0.471	0.537	0.073	0.000
1330	225.	0.161	0.059	0.455	0.514	0.068	0.000
1345	240.	0.169	0.054	0.439	0.491	0.060	0.000
1400	255.	0.186	0.049	0.416	0.464	0.052	0.001
1415	270.	0.198	0.046	0.397	0.443	0.046	0.001
1430	285.	0.213	0.044	0.378	0.420	0.042	0.001
1445	300.	0.225	0.039	0.357	0.396	0.037	0.001
1500	315.	0.237	0.037	0.341	0.377	0.032	0.001
1515	330.	0.249	0.032	0.324	0.358	0.027	0.000
1530	345.	0.266	0.032	0.303	0.335	0.023	0.001
1545	360.	0.276	0.027	0.284	0.311	0.019	0.001

EC -149
PROPENE + TRANS-2-BUTENE
1976 APR 16

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM
945	0.	2.10	0.000	0.0	0.002	0.0003	0.0036	******	******	0.0001	0.0
1000	15.	2.05	******	******	******	******	******	******	******	******	******
1015	30.	2.07	0.007	******	0.209	0.0008	0.0060	0.0001	0.0006	******	0.0
1030	45.	2.15	******	******	******	******	******	******	******	******	******
1045	60.	2.13	0.027	0.058	0.322	0.0018	0.0077	0.0002	0.0028	0.0014	0.0013
1100	75.	2.21	******	******	******	******	******	******	******	******	******
1115	90.	2.19	0.044	******	0.339	0.0025	0.0119	0.0004	0.0030	******	0.0020
1130	105.	2.22	******	******	******	******	******	******	******	******	******
1145	120.	2.29	0.052	0.099	0.325	0.0029	0.0084	0.0005	0.0028	******	0.0028
1200	135.	2.31	******	******	******	******	******	******	******	******	******
1215	150.	2.34	0.064	******	0.314	******	0.0092	0.0006	0.0029	0.0032	0.0028
1230	165.	2.42	******	******	******	******	******	******	******	******	******
1245	180.	2.40	0.071	0.105	0.312	0.0041	0.0123	0.0008	0.0033	0.0042	0.0036
1300	195.	2.43	******	******	******	******	******	******	******	******	******
1315	210.	2.46	0.077	******	0.284	0.0038	0.0105	0.0008	0.0029	0.0042	0.0039
1330	225.	2.45	******	******	******	******	******	******	******	******	******
1345	240.	2.50	0.084	0.062	0.271	0.0042	0.0123	0.0005	0.0029	0.0045	0.0042
1400	255.	2.53	******	******	******	******	******	******	******	******	******
1415	270.	2.47	0.092	******	0.246	0.0040	0.0120	0.0010	0.0028	0.0047	0.0045
1430	285.	2.59	******	******	******	******	******	******	******	******	******
1445	300.	2.63	0.100	0.081	0.241	0.0045	0.0149	0.0012	0.0029	0.0051	0.0045
1500	315.	2.56	******	******	******	******	******	******	******	******	******
1515	330.	2.68	0.103	******	0.214	0.0043	0.0130	0.0013	0.0027	0.0050	0.0050
1530	345.	2.67	******	******	******	******	******	******	******	******	******
1545	360.	2.74	0.112	0.087	0.193	0.0045	0.0125	0.0014	0.0026	0.0052	0.0050

EC -149
PROPENE + TRANS-2-BUTENE
1976 APR 16

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	64.5	61.5	******	******	20.00
1000	15.	67.7	62.0	******	0.499	******
1015	30.	86.0	63.0	******	0.499	******
1030	45.	85.5	64.5	******	0.477	******
1045	60.	86.0	65.0	16.50	0.487	20.00
1100	75.	86.0	65.0	******	******	******
1115	90.	86.7	65.0	******	******	******
1130	105.	86.2	64.5	******	0.514	******
1145	120.	87.0	65.0	16.60	0.489	20.00
1200	135.	86.0	65.0	******	******	******
1215	150.	85.7	64.0	******	******	******
1230	165.	86.2	65.0	******	******	******
1245	180.	86.0	64.0	16.40	0.482	20.00
1300	195.	86.0	64.0	******	0.475	******
1315	210.	85.2	64.0	******	0.467	******
1330	225.	85.2	63.0	******	0.462	******
1345	240.	85.5	63.5	15.80	0.462	20.00
1400	255.	85.5	63.0	******	0.465	******
1415	270.	85.7	63.0	******	0.465	******
1430	285.	85.5	63.0	******	0.472	******
1445	300.	85.5	63.0	16.90	0.470	20.00
1500	315.	85.2	62.5	******	0.470	******
1515	330.	85.7	62.5	******	******	******
1530	345.	86.5	62.0	******	0.477	******
1545	360.	85.5	62.5	15.90	0.475	20.00

EC -150
FOUR ALKENES
1976 APR 19

BEGIN IRRADIATION 1000, 0.25 INCH PYREX FILTER
NO SPEC DISTRIB DUE TO RECORDER MALFUNCTION
AT 1600 HOURS ESTIMATE C2-N = 0.3 PPB
CO FACTOR 2.2/1.24
RADIOMETER CORRECTION -0.008 MW/CM2

T=0 AT 1000 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	65.36
SSPOWER	KW	AVERAGE	16.45
RADIOM	MW/CM2	AVERAGE	0.486
H2O	PPM	AVERAGE	2.678E 04
NO	PPM	INIT COND	0.774
NO2-CORR	PPM	INIT COND	0.222
CO	PPM	INIT COND	2.149
HCHO	PPM	INIT COND	0.050
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002
ETHENE	PPM	INIT COND	1.014
PROPENE	PPM	INIT COND	0.224
PROPENE	PPM	INIT COND	0.224
PROPENE	PPM	INIT COND	0.224

* ASSIGNED INITIAL CONDITION

K1=0.33 MIN-1

SAMPLING RATE = 1.777 L/MIN

46 GC SAMPLES TAKEN

EC -150
FOUR ALKENES
1976 APR 19

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	1-C4= PPM	T2-C4= PPM
1000	0.	0.0	0.774	0.222	0.998	1.014	0.224	0.097	0.093
1015	15.	0.0	0.642	0.333	0.976	0.969	0.212	0.090	0.073
1030	30.	0.002	0.511	0.437	0.948	0.937	0.187	0.078	0.052
1045	45.	0.010	0.393	0.509	0.902	0.907	0.165	0.068	0.034
1100	60.	0.020	0.305	0.561	0.866	0.869	0.148	0.059	0.021
1115	75.	0.039	0.225	0.606	0.833	0.838	0.133	0.052	0.013
1130	90.	0.054	0.176	0.627	0.803	0.809	0.123	0.046	0.007
1145	105.	0.078	0.137	0.630	0.769	0.787	0.109	0.042	0.004
1200	120.	0.105	0.110	0.615	0.725	0.760	0.097	0.037	0.001
1215	135.	0.132	0.085	0.607	0.692	0.733	0.081	0.031	0.000
1230	150.	0.166	0.071	0.582	0.655	0.712	0.073	0.027	0.000
1245	165.	0.195	0.059	0.562	0.621	0.688	0.065	0.023	0.000
1300	180.	0.232	0.054	0.525	0.576	0.658	0.057	0.020	0.000
1315	195.	0.271	0.039	0.495	0.537	0.628	0.046	0.016	0.000
1330	210.	0.306	0.034	0.458	0.492	0.604	0.039	0.013	0.000
1345	225.	0.352	0.029	0.421	0.450	0.580	0.031	0.011	0.000
1400	240.	0.398	0.024	0.377	0.404	0.552	0.026	0.009	0.000
1415	255.	0.440	0.022	0.333	0.357	0.526	0.020	0.007	0.000
1430	270.	0.491	0.020	0.291	0.311	0.497	0.016	0.005	0.000
1445	285.	0.540	0.015	0.243	0.261	0.464	0.012	0.004	0.000
1500	300.	0.601	0.015	0.200	0.215	0.442	0.009	0.003	0.000
1515	315.	0.652	0.012	0.157	0.172	0.404	0.007	0.002	******
1530	330.	0.703	0.010	0.118	0.131	0.377	0.005	0.002	0.000
1545	345.	0.752	0.010	0.078	0.092	0.349	0.003	0.001	0.000
1600	360.	0.799	0.010	0.042	0.052	0.323	0.002	0.001	0.000

EC -150
FOUR ALKENES
1976 APR 19

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	PROX PPM	BUOX PPM	ME-N PPM
1000	0.	2.15	0.000	0.000	0.050	0.001	0.0002	0.0017	0.0003	******	0.0	0.0
1015	15.	2.13	******	******	******	******	******	******	******	******	******	******
1030	30.	2.08	0.002	0.000	******	******	******	******	******	******	******	0.0
1045	45.	2.14	******	******	******	******	******	******	******	******	******	******
1100	60.	2.20	0.012	0.003	0.161	0.103	0.0227	******	0.0006	******	******	0.0006
1115	75.	2.20	******	******	******	******	******	******	******	******	******	******
1130	90.	2.23	0.020	0.007	******	******	******	******	******	******	******	0.0006
1145	105.	2.33	******	******	******	******	******	******	******	******	******	******
1200	120.	2.47	0.030	0.011	0.201	0.139	0.0341	******	0.0014	******	0.0012	0.0012
1215	135.	2.42	******	******	******	******	******	******	******	******	******	******
1230	150.	2.43	0.042	0.015	******	******	******	******	******	******	******	0.0016
1245	165.	2.54	******	******	******	******	******	******	******	******	******	******
1300	180.	2.54	0.053	0.018	0.433	0.139	0.0364	******	0.0021	0.0024	0.0016	0.0022
1315	195.	2.62	******	******	******	******	******	******	******	******	******	******
1330	210.	2.76	0.064	0.023	******	******	******	******	******	******	******	0.0025
1345	225.	2.73	******	******	******	******	******	******	******	******	******	******
1400	240.	2.81	0.077	0.029	0.282	0.130	0.0341	0.0120	0.0027	0.0028	0.0017	0.0027
1415	255.	2.83	******	******	******	******	******	******	******	******	******	******
1430	270.	2.89	0.088	0.033	******	******	******	******	******	******	******	0.0030
1445	285.	3.00	******	******	******	******	******	******	******	******	******	******
1500	300.	3.04	0.109	0.034	0.356	0.102	0.0272	0.0118	0.0033	0.0029	0.0014	0.0034
1515	315.	3.13	******	******	******	******	******	******	******	******	******	******
1530	330.	3.18	0.124	0.038	******	******	******	******	******	******	******	0.0036
1545	345.	3.23	******	******	******	******	******	******	******	******	******	******
1600	360.	3.35	0.145	0.045	0.363	0.066	******	0.0122	0.0040	0.0030	0.0016	0.0026

EC -150
FOUR ALKENES
1976 APR 19

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM MR/CM2	HCHO VOL L
1000	0.	86.7	46.0	******	0.483	20.00
1015	15.	87.0	48.5	16.40	0.495	******
1030	30.	85.5	56.5	******	0.485	******
1045	45.	85.2	63.0	******	0.485	******
1100	60.	85.7	65.0	16.50	0.481	20.00
1115	75.	85.7	66.0	******	0.488	******
1130	90.	86.2	66.0	******	******	******
1145	105.	86.5	66.5	******	******	******
1200	120.	86.2	66.5	******	0.483	20.00
1215	135.	86.2	66.5	******	******	******
1230	150.	86.5	66.0	******	******	******
1245	165.	86.2	65.5	******	******	******
1300	180.	85.7	65.0	16.40	0.483	20.00
1315	195.	86.0	65.0	******	******	******
1330	210.	87.0	64.5	******	******	******
1345	225.	86.5	65.0	******	******	******
1400	240.	86.0	64.5	16.40	0.488	20.00
1415	255.	86.2	64.5	******	******	******
1430	270.	86.7	63.5	******	******	******
1445	285.	87.2	64.5	******	******	******
1500	300.	86.5	65.0	16.00	0.493	20.00
1515	315.	87.0	64.0	******	0.483	******
1530	330.	86.5	63.5	******	0.481	******
1545	345.	86.2	64.0	******	0.478	******
1600	360.	86.2	64.0	16.40	0.483	20.00

EC -151
FOUR ALKENES
1976 APR 20

BEGIN IRRADIATION 0945, 0.25 INCH PYREX FILTER
AT 1545 HOURS ESTIMATE C2-N = 0.3 PPB
CO FACTOR 2.2/1.24
RADIOMETER CORRECTION -0.005 MW/CM2

T=0 AT 945 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	65.00
SSPOWER	KW	AVERAGE	15.12
RADIOM	MW/CM2	AVERAGE	0.496
H2O	PPM	AVERAGE	2.713E 04
NO	PPM	INIT COND	1.466
NO2-CORR	PPM	INIT COND	0.550
CO	PPM	INIT COND	2.288
ACETYNE	PPM	INIT COND	0.002
ETHENE	PPM	INIT COND	0.575
PROPENE	PPM	INIT COND	0.441
PROPENE	PPM	INIT COND	0.441
PROPENE	PPM	INIT COND	0.441

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.489
430.	2.083
403.	1.913
380.	1.598
370.	1.416
360.	1.208
350.	1.000
340.	0.707
330.	0.462
320.	0.239
310.	0.085
300.	0.019
290.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.791 L/MIN

66 GC SAMPLES TAKEN

EC -151
FOUR ALKENES
1976 APR 20

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	1-C4= PPM	T2-C4= PPM
945	0.	0.0	1.466	0.590	2.056	0.975	0.441	0.209	0.190
1000	15.	0.0	1.280	0.739	2.024	0.938	0.406	0.193	0.144
1015	30.	0.0	1.128	0.856	1.992	0.905	******	0.176	0.104
1030	45.	0.0	0.982	0.960	1.947	0.872	0.345	0.156	0.073
1045	60.	0.0	0.865	1.027	1.897	0.844	0.308	0.137	0.049
1100	75.	0.002	0.791	1.055	1.851	0.822	0.281	0.123	0.032
1115	90.	0.002	0.713	1.082	1.795	0.798	0.255	0.111	0.021
1130	105.	0.002	0.650	1.105	1.749	0.774	0.237	0.100	0.013
1145	120.	0.005	0.572	1.122	1.704	0.752	0.208	0.087	0.008
1200	135.	0.005	0.528	1.123	1.651	0.727	0.188	0.077	0.005
1215	150.	0.005	0.484	1.124	1.607	0.701	0.165	0.067	0.003
1230	165.	0.015	0.440	1.111	1.551	0.684	0.153	0.060	0.001
1245	180.	0.015	0.396	1.109	1.509	0.666	0.130	0.051	0.001
1300	195.	0.024	0.352	1.096	1.447	0.639	0.120	0.046	0.001
1315	210.	0.029	0.318	1.093	1.410	0.618	0.106	0.041	0.001
1330	225.	0.032	0.288	1.077	1.355	0.597	0.096	0.056	0.001
1345	240.	0.044	0.244	1.066	1.320	0.588	0.087	0.032	0.001
1400	255.	0.051	0.225	1.036	1.261	0.563	0.074	0.027	0.000
1415	270.	0.054	0.205	1.016	1.221	0.547	0.068	0.025	0.001
1430	285.	0.054	0.176	1.007	1.178	0.527	0.061	0.022	0.001
1445	300.	0.081	0.161	0.974	1.135	0.510	0.053	0.019	0.000
1500	315.	0.083	0.142	0.950	1.092	0.492	0.048	0.016	0.001
1515	330.	0.103	0.132	0.917	1.053	0.477	0.042	0.014	0.001
1530	345.	0.127	0.117	0.889	1.007	0.460	0.036	0.012	0.001
1545	360.	0.147	0.107	0.857	0.960	0.439	0.031	0.010	0.001

EC -151
FOUR ALKENES
1976 APR 20

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	PROX PPM	BUOX PPM	ME-N PPM
945	0.	2.29	0.000	0.000	0.0	******	0.0001	0.0018	0.0001	******	0.0	0.0
1000	15.	2.14	******	******	******	******	******	******	******	******	******	******
1015	30.	2.20	0.004	0.002	******	0.153	0.0324	******	0.0015	0.0021	0.0015	0.0006
1030	45.	2.21	******	******	******	******	******	******	******	******	******	******
1045	60.	2.31	0.012	0.004	0.191	0.254	0.0527	0.0133	0.0025	0.0044	0.0029	0.0017
1100	75.	2.34	******	******	******	******	******	******	******	******	******	******
1115	90.	2.37	0.022	0.007	******	0.299	0.0670	0.0168	0.0034	0.0074	0.0043	0.0028
1130	105.	2.43	******	******	******	******	******	******	******	******	******	******
1145	120.	2.52	0.029	0.012	******	0.295	0.0679	******	0.0036	0.0080	0.0050	0.0045
1200	135.	2.61	******	******	******	******	******	******	******	******	******	******
1215	150.	2.62	0.034	0.013	******	0.327	0.0698	******	0.0039	0.0111	0.0061	0.0059
1230	165.	2.66	******	******	******	******	******	******	******	******	******	******
1245	180.	2.74	0.044	0.017	0.473	0.327	0.0710	******	0.0039	0.0125	0.0062	0.0078
1300	195.	2.80	******	******	******	******	******	******	******	******	******	******
1315	210.	2.89	0.047	0.019	******	0.313	0.0740	******	0.0039	0.0133	0.0067	0.0064
1330	225.	2.89	******	******	******	******	******	******	******	******	******	******
1345	240.	3.07	0.055	0.023	0.512	0.319	0.0725	******	0.0037	0.0140	0.0070	0.0095
1400	255.	3.11	******	******	******	******	******	******	******	******	******	******
1415	270.	3.18	0.061	0.026	******	0.284	0.0657	******	0.0035	0.0140	0.0069	******
1430	285.	3.22	******	******	******	******	******	******	******	******	******	******
1445	300.	3.27	0.067	0.028	0.504	0.228	0.0501	******	0.0028	0.0111	0.0063	0.0112
1500	315.	3.23	******	******	******	******	******	******	******	******	******	******
1515	330.	3.35	0.073	0.029	******	0.248	0.0531	******	0.0032	0.0139	0.0064	0.0123
1530	345.	3.43	******	******	******	******	******	******	******	******	******	******
1545	360.	3.51	0.077	0.030	0.433	0.226	0.0491	******	0.0026	0.0133	0.0061	0.0123

EC -151
FOUR ALKENES
1976 APR 20

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADICM MW/CM2	HCHO VOL L
945	0.	77.2	64.0	******	0.501	20.00
1000	15.	82.1	64.5	******	0.501	******
1015	30.	82.3	65.5	******	0.501	******
1030	45.	83.0	65.5	******	******	******
1045	60.	83.5	66.0	******	0.493	20.00
1100	75.	84.3	66.5	******	0.488	******
1115	90.	85.2	66.5	******	******	******
1130	105.	85.2	66.5	******	******	******
1145	120.	85.7	66.5	16.40	0.496	20.00
1200	135.	86.5	66.0	******	******	******
1215	150.	86.7	65.5	******	******	******
1230	165.	86.5	65.0	******	******	******
1245	180.	86.5	65.5	******	0.501	20.00
1300	195.	86.7	65.0	******	******	******
1315	210.	86.7	65.5	******	******	******
1330	225.	87.2	65.0	******	******	******
1345	240.	87.2	64.5	16.10	******	20.00
1400	255.	87.0	64.5	******	******	******
1415	270.	87.0	64.0	******	******	******
1430	285.	87.2	64.0	******	******	******
1445	300.	87.4	64.0	16.30	0.479	20.00
1500	315.	87.4	63.5	******	0.474	******
1515	330.	87.9	63.5	******	0.503	******
1530	345.	88.4	63.0	******	0.506	******
1545	360.	88.4	63.5	11.70	0.525	20.00

EC -152
FOUR ALKENES
1976 APR 21

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER
AEROSPACE PARM ON CHAMBER, 0.6 L/MIN
AT 1600 HOURS: C1-N = 0.5 PPB, C2-N = 0.3 PPB
CO FACTOR 2.2/1.21
RADIOMETER CORRECTION -0.002 MW/CM2

T=0 AT 1000 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	303.2
REL HUM	%	AVERAGE	62.96
SSPOWER	KW	AVERAGE	16.73
RADIOM	MW/CM2	AVERAGE	0.497
H2O	PPM	AVERAGE	2.643E 04
NO	PPM	INIT COND	0.398
NO2-CORR	PPM	INIT COND	0.104
CO	PPM	INIT COND	2.189
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.003
ETHENE	PPM	INIT COND	1.015
PROPENE	PPM	INIT COND	0.116
PROPENE	PPM	INIT COND	0.116
PROPENE	PPM	INIT COND	0.116

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.579
430.	2.216
403.	1.591
380.	1.639
370.	1.428
360.	1.228
350.	1.000
340.	0.693
330.	0.458
320.	0.225
310.	0.072
300.	0.014
290.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 2.396 L/MIN

73 GC SAMPLES TAKEN

EC -152
FOUR ALKENES
1976 APR 21

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	1-C4= PPM	T2-C4= PPM
1000	0.	0.0	0.358	0.104	0.504	1.015	0.116	0.222	0.102
1015	15.	0.010	0.250	0.237	0.489	0.962	0.102	0.191	0.071
1030	30.	0.051	0.125	0.336	0.461	0.918	0.089	0.162	0.042
1045	45.	0.149	0.055	0.362	0.418	0.872	0.072	0.127	0.016
1100	60.	0.249	0.033	0.348	0.382	0.829	0.061	0.114	0.004
1115	75.	0.332	0.026	0.314	0.340	0.784	0.050	0.085	0.001
1130	90.	0.405	0.022	0.272	0.292	0.743	0.041	0.068	0.000
1145	105.	0.481	0.017	0.229	0.246	0.701	0.031	0.051	0.000
1200	120.	0.542	0.016	0.186	0.201	0.663	0.024	0.040	******
1215	135.	0.608	0.013	0.153	0.167	0.623	0.019	0.029	0.000
1230	150.	0.667	0.012	0.122	0.133	0.583	0.014	0.021	0.000
1245	165.	0.716	0.016	0.084	0.100	0.542	0.009	0.015	0.000
1300	180.	0.755	0.012	0.062	0.074	0.508	0.007	0.011	0.000
1315	195.	0.777	0.011	0.044	0.055	0.470	0.005	0.008	0.000
1330	210.	0.787	0.011	0.031	0.042	0.449	0.004	0.006	0.000
1345	225.	0.787	0.011	0.023	0.034	0.416	0.003	0.004	0.000
1400	240.	0.777	0.012	0.019	0.032	0.396	0.002	0.003	0.000
1415	255.	0.767	0.011	0.015	0.024	0.371	0.002	0.002	******
1430	270.	0.755	0.011	0.010	0.021	0.357	0.001	0.002	******
1445	285.	0.743	0.011	0.003	0.014	0.341	0.001	0.002	0.000
1500	300.	0.728	0.011	0.004	0.014	0.322	0.001	0.001	0.000
1515	315.	0.716	0.011	0.003	0.014	0.306	0.001	0.001	0.000
1530	330.	0.708	0.011	0.000	0.011	0.293	0.001	0.001	0.000
1545	345.	0.699	0.011	0.0	0.010	0.276	0.000	0.001	0.000
1600	360.	0.689	0.011	0.0	0.008	0.263	0.000	0.000	0.000

EC -152
FOUR ALKENES
1970 APR 21

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	BUOX PPM
1000	0.	2.19	0.000	0.000	0.0	0.002	0.0004	0.0032	0.0002	0.0
1015	15.	2.21	******	******	******	******	******	******	******	******
1030	30.	2.28	0.007	0.002	******	0.081	0.0417	******	0.0007	0.0004
1045	45.	2.30	******	******	******	******	******	******	******	******
1100	60.	2.34	0.027	0.008	0.127	0.120	0.0642	******	0.0018	0.0008
1115	75.	2.43	******	******	******	******	******	******	******	******
1130	90.	2.46	0.046	0.016	******	0.124	0.0716	******	0.0027	0.0012
1145	105.	2.49	******	******	******	******	******	******	******	******
1200	120.	2.51	0.062	0.034	0.242	0.118	0.0741	******	0.0032	0.0012
1215	135.	2.60	******	******	******	******	******	******	******	******
1230	150.	2.61	0.076	0.034	******	0.111	0.0708	******	0.0037	0.0013
1245	165.	2.74	******	******	******	******	******	******	******	******
1300	180.	2.80	0.097	0.035	0.246	0.105	0.0642	******	0.0039	0.0014
1315	195.	2.87	******	******	******	******	******	******	******	******
1330	210.	2.86	0.109	0.041	******	0.091	0.0519	******	0.0037	******
1345	225.	2.97	******	******	******	******	******	******	******	******
1400	240.	3.00	0.111	0.038	0.242	0.087	0.0469	******	0.0036	0.0013
1415	255.	3.02	******	******	******	******	******	******	******	******
1430	270.	3.14	0.115	0.041	******	0.078	0.0388	******	0.0033	0.0010
1445	285.	3.10	******	******	******	******	******	******	******	******
1500	300.	3.18	0.113	0.045	0.262	0.081	0.0388	******	0.0033	0.0013
1515	315.	3.21	******	******	******	******	******	******	******	******
1530	330.	3.27	0.111	0.046	******	0.075	0.0337	******	0.0032	0.0013
1545	345.	3.27	******	******	******	******	******	******	******	******
1600	360.	3.33	0.108	0.050	0.260	0.071	0.0292	******	0.0031	******

EC -152
FOUR ALKENES
1976 APR 21

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADICM MW/CM2	HCHO VOL L
1000	0.	87.0	50.0	******	0.491	20.00
1015	15.	90.1	50.0	******	0.511	******
1030	30.	87.2	54.0	******	0.496	******
1045	45.	87.2	61.0	******	0.491	******
1100	60.	87.2	64.0	16.90	0.504	20.00
1115	75.	86.2	65.0	******	******	******
1130	90.	86.2	65.0	******	******	******
1145	105.	86.2	66.0	******	******	******
1200	120.	85.5	65.5	16.70	0.494	20.00
1215	135.	86.0	65.0	******	0.501	******
1230	150.	85.7	65.0	******	******	******
1245	165.	85.2	64.5	******	******	******
1300	180.	85.2	64.5	16.60	0.487	20.00
1315	195.	85.5	64.5	******	******	******
1330	210.	85.7	64.5	******	******	******
1345	225.	85.7	64.0	******	******	******
1400	240.	85.5	64.0	16.60	******	20.00
1415	255.	85.2	64.0	******	0.494	******
1430	270.	85.2	64.0	******	0.489	******
1445	285.	85.7	64.0	******	0.489	******
1500	300.	85.7	64.0	16.80	0.511	20.00
1515	315.	86.0	64.0	******	0.496	******
1530	330.	86.2	64.0	******	0.499	******
1545	345.	85.2	64.0	******	0.489	******
1600	360.	85.5	64.0	16.80	0.496	20.00

EC -153
FOUR ALKENES
1976 APR 22

BEGIN IRRADIATION 0930, 0.25 INCH PYREX FILTER
AEROSPACE PAFM ON CHAMBER, 0.6 L/MIN
INCREASED FLOW TO 4.34 L/MIN, 1439-1511 HOURS
CO FACTOR 2.2/1.21
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 930 PST

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	302.4
REL HUM	%	AVERAGE	63.48
SSPOWER	KW	AVERAGE	17.29
RADIOM	MW/CM2	AVERAGE	0.496
H2O	PPM	AVERAGE	3.542E 04
NO	PPM	INIT COND	0.774
NO2-CORR	PPM	INIT COND	0.197
ETHENE	PPM	INIT COND	1.923
PROPENE	PPM	INIT COND	0.109
1-C4=	PPM	INIT COND	0.415
T2-C4=	PPM	INIT COND	0.193
CO	PPM	INIT COND	2.030
ACETALD	PPM	INIT COND	0.003
ACETONE	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.652
430.	2.253
403.	2.038
380.	1.650
370.	1.404
360.	1.294
350.	1.000
340.	0.704
330.	0.466
320.	0.231
310.	0.072
300.	0.009
290.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 2.339 L/MIN

71 GC SAMPLES TAKEN

EC -153
FOUR ALKENES
1976 APR 22

CLOCK TIME	ELAPSED TIMIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	1-C4= PPM	T2-C4= PPM
930	0.	0.0	0.774	0.197	0.969	1.923	0.109	0.415	0.193
945	15.	0.002	0.489	0.446	0.937	1.831	0.098	0.486	0.140
1000	30.	0.037	0.222	0.654	0.876	1.729	0.080	0.239	0.074
1015	45.	0.176	0.076	0.706	0.786	1.630	0.068	0.243	0.003
1030	60.	0.327	0.042	0.650	0.694	1.541	0.052	0.185	0.004
1045	75.	0.445	0.029	0.576	0.605	******	******	******	******
1100	90.	0.557	0.022	0.486	0.512	1.380	0.035	0.117	0.0
1115	105.	0.664	0.017	0.390	0.409	1.285	0.025	0.082	0.0
1130	120.	0.762	0.015	0.298	0.313	1.212	0.019	0.061	0.0
1145	135.	0.862	0.012	0.204	0.217	1.093	0.011	0.037	0.0
1200	150.	0.960	0.012	0.125	0.137	1.022	0.009	0.026	0.0
1215	165.	1.021	0.012	0.075	0.088	0.953	0.006	0.019	0.0
1230	180.	1.050	0.012	0.036	0.048	0.880	0.004	0.013	0.0
1245	195.	1.043	0.012	0.017	0.029	0.819	0.003	0.009	0.0
1300	210.	1.023	0.012	0.003	0.012	0.765	0.002	0.005	0.0
1315	225.	1.004	0.010	-0.023	-0.013	0.722	0.002	0.004	0.0
1330	240.	0.972	0.012	-0.026	-0.014	0.690	0.001	0.003	0.0
1345	255.	0.943	0.010	-0.023	-0.014	0.651	0.001	0.002	0.0
1400	270.	0.916	0.010	-0.019	-0.009	0.615	0.001	0.001	0.0
1415	285.	0.894	0.010	-0.015	-0.005	0.588	0.000	0.001	0.0
1430	300.	0.874	0.015	-0.019	-0.004	0.557	0.000	0.001	0.0
1445	315.	0.857	0.010	-0.011	-0.001	0.526	0.000	0.001	0.0
1500	330.	0.835	0.010	-0.013	-0.004	0.496	0.000	0.001	0.0
1515	345.	0.818	0.010	-0.006	0.004	0.466	0.000	0.000	0.0
1530	360.	0.801	0.010	0.002	0.014	0.446	0.000	0.000	0.0

EC -153
FOUR ALKENES
1976 APR 22

CLOCK TIME	ELAPSED TIME(MIN)	CO PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	BUOX PPM	ME-N PPM	C2-N PPM
930	0.	2.03	0.000	0.000	0.0	0.003	0.0003	0.0030	0.0002	0.0	0.0	0.0
945	15.	2.00	******	******	******	******	******	******	******	******	******	******
1000	30.	2.08	0.010	0.005	******	0.157	0.0745	******	0.0017	0.0014	0.0	0.0
1015	45.	2.11	******	******	******	******	******	******	******	******	******	******
1030	60.	2.23	0.046	0.031	0.312	0.211	0.1240	******	0.0038	0.0032	0.0008	0.0
1045	75.	2.34	******	******	******	******	******	******	******	******	******	******
1100	90.	2.39	0.072	0.049	******	0.209	0.1430	******	0.0050	0.0040	0.0015	0.0
1115	105.	2.49	******	******	******	******	******	******	******	******	******	******
1130	120.	2.57	0.101	0.076	0.524	0.249	0.1430	******	0.0053	0.0043	0.0017	0.0
1145	135.	2.61	******	******	******	******	******	******	******	******	******	******
1200	150.	2.77	0.139	0.103	******	0.181	0.1280	******	0.0052	0.0044	0.0019	0.0005
1215	165.	2.90	******	******	******	******	******	******	******	******	******	******
1230	180.	2.94	0.167	0.105	0.644	0.165	0.1110	******	0.0048	0.0042	0.0021	0.0006
1245	195.	3.10	******	******	******	******	******	******	******	******	******	******
1300	210.	3.10	0.167	0.114	******	0.153	0.0998	******	0.0047	0.0043	0.0019	0.0006
1315	225.	3.24	******	******	******	******	******	******	******	******	******	******
1330	240.	3.30	0.172	0.125	0.413	0.135	0.0819	0.0257	0.0039	0.0038	0.0019	0.0006
1345	255.	3.32	******	******	******	******	******	******	******	******	******	******
1400	270.	3.38	0.175	0.108	******	0.157	0.0837	0.0273	0.0039	0.0043	0.0017	0.0005
1415	285.	3.46	******	******	******	******	******	******	******	******	******	******
1430	300.	3.51	0.170	0.100	******	0.140	0.0719	0.0257	0.0036	0.0036	0.0017	0.0006
1445	315.	3.64	******	******	******	******	******	******	******	******	******	******
1500	330.	3.66	0.162	0.096	******	0.136	0.0625	0.0273	0.0034	0.0030	0.0018	0.0006
1515	345.	3.70	******	******	0.425	******	******	******	******	******	******	******
1530	360.	3.70	0.153	0.082	******	0.133	0.0561	0.0389	0.0027	0.0035	0.0019	0.0006

EC -153
FOUR ALKENES
1976 APR 22

CLOCK TIME	ELAPSED TIMIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	87.2	60.5	******	0.477	20.00
945	15.	89.2	60.0	******	0.499	******
1000	30.	87.0	60.5	17.30	0.497	******
1015	45.	86.7	63.5	******	0.489	******
1030	60.	87.2	64.0	16.90	0.485	20.00
1045	75.	87.2	64.5	******	0.487	******
1100	90.	87.0	65.0	******	0.492	******
1115	105.	87.0	65.0	******	******	******
1130	120.	87.0	65.0	16.90	0.485	20.00
1145	135.	87.7	64.5	******	******	******
1200	150.	87.9	64.5	******	******	******
1215	165.	87.9	64.5	******	******	******
1230	180.	87.4	64.0	17.80	0.514	20.00
1245	195.	87.2	64.0	******	******	******
1300	210.	87.0	64.0	******	******	******
1315	225.	87.0	63.5	******	******	******
1330	240.	87.2	63.5	17.00	0.494	20.00
1345	255.	87.0	63.0	******	0.480	******
1400	270.	86.5	63.5	******	0.482	******
1415	285.	86.5	63.0	******	0.482	******
1430	300.	87.0	63.0	17.40	0.497	******
1445	315.	87.0	63.0	******	0.497	******
1500	330.	87.2	63.0	******	0.516	******
1515	345.	87.2	62.5	******	0.511	20.00
1530	360.	87.7	62.5	17.70	0.504	******

EC -156
ETHENE
1976 MAY 4

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER
AEROSPACE PNFM ON CHAMBER, 0.6 L/MIN
ACETALD,PROPALC AND ETOX MONITORED WITH 3-PART COLUMN
PPN POSSIBLY DUE TO CONTAMINATION FROM PREVIOUS RUN
CO FACTOR 2.2/1.23
RADIOMETER CORRECTION -0.014 MW/CM2

T=0 AT 930 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	61.57
SSPOWER	KW	AVERAGE	17.47
RADIOM	MW/CM2	AVERAGE	0.474
H2O	PPM	AVERAGE	2.599E 04
NO	PPM	INIT COND	0.376
NO2-CORR	PPM	INIT COND	0.124
CO	PPM	INIT COND	2.023
HCHO	PPM	INIT COND	0.027
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003
ETHENE	PPM	INIT COND	1.995

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	3.288
430.	2.469
403.	2.198
380.	1.699
370.	1.482
360.	1.295
350.	1.000
340.	0.658
330.	0.415
320.	0.200
310.	0.064
300.	0.012
290.	0.0

K1=0.32 MIN-1

SAMPLING RATE = 2.377 L/MIN

45 GC SAMPLES TAKEN

EC -156
ETHENE
1976 MAY 4

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM
930	0.	0.0	0.376	0.124	0.501	1.955
945	15.	0.012	0.231	0.250	0.483	1.885
1000	30.	0.044	0.127	0.334	0.461	1.796
1015	45.	0.110	0.065	0.365	0.430	1.708
1030	60.	0.203	0.037	0.364	0.402	1.615
1045	75.	0.308	0.020	0.348	0.369	1.516
1100	90.	0.437	0.012	0.318	0.330	1.436
1115	105.	0.579	0.006	0.272	0.282	1.324
1130	120.	0.728	0.005	0.222	0.227	1.210
1145	135.	0.838	0.002	0.176	0.178	1.119
1200	150.	0.945	0.002	0.137	0.139	1.016
1215	165.	1.009	0.001	0.106	0.107	0.925
1230	180.	1.045	0.001	0.083	0.085	0.847
1245	195.	1.055	0.002	0.064	0.066	0.776
1300	210.	1.050	0.002	0.050	0.052	0.720
1315	225.	1.038	0.002	0.041	0.043	0.670
1330	240.	1.009	0.002	0.034	0.036	0.632
1345	255.	0.992	0.002	0.030	0.032	0.583
1400	270.	0.970	0.002	0.030	0.032	0.551
1415	285.	0.938	0.002	0.023	0.024	0.519
1430	300.	******	0.001	0.021	0.023	0.487
1445	315.	0.879	0.002	0.018	0.021	0.462
1500	330.	0.852	0.002	0.019	0.022	0.436
1515	345.	******	0.002	0.018	0.020	0.412
1530	360.	0.796	0.002	0.018	0.021	0.392

EC -156
ETHENE
1976 MAY 4

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	ETOX PPM
930	0.	2.02	0.000	0.000	0.027	0.0009	0.0004	0.0034	0.0004	******
945	15.	2.08	******	******	******	******	******	******	******	******
1000	30.	2.09	0.000	0.000	******	0.0017	0.0014	******	******	******
1015	45.	2.15	******	******	******	******	******	******	******	******
1030	60.	2.18	0.001	0.001	0.262	0.0023	0.0029	******	******	******
1045	75.	2.28	******	******	******	******	******	******	******	******
1100	90.	2.30	0.003	0.002	******	0.0025	0.0052	******	******	******
1115	105.	2.40	******	******	******	******	******	******	******	******
1130	120.	2.47	0.005	0.002	0.504	0.0042	0.0078	0.0284	0.0037	******
1145	135.	2.52	******	******	******	******	******	******	******	******
1200	150.	2.63	0.007	0.003	******	0.0050	0.0102	******	******	******
1215	165.	2.81	******	******	******	******	******	******	******	******
1230	180.	2.85	0.010	0.003	0.655	******	******	******	******	******
1245	195.	2.93	******	******	******	******	******	******	******	******
1300	210.	3.05	0.012	0.004	******	0.0102	0.0158	******	******	******
1315	225.	3.16	******	******	******	******	******	******	******	******
1330	240.	3.25	0.013	0.004	0.735	******	0.0125	0.0349	0.0051	0.0009
1345	255.	3.29	******	******	******	******	******	******	******	******
1400	270.	3.41	0.014	0.004	******	0.0096	0.0094	******	******	0.0012
1415	285.	3.44	******	******	******	******	******	******	******	******
1430	300.	3.45	0.014	0.004	0.634	0.0054	0.0078	******	******	0.0010
1445	315.	3.57	******	******	******	******	******	******	******	******
1500	330.	3.59	0.015	0.004	******	0.0044	0.0068	******	******	0.0010
1515	345.	3.67	******	******	******	******	******	******	******	******
1530	360.	3.69	0.015	0.003	0.572	0.0076	0.0065	0.0307	0.0043	0.0013

EC -156
ETHENE
1976 MAY 4

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	83.8	60.5	******	0.435	15.00
945	15.	85.5	60.5	17.60	0.489	******
1000	30.	85.2	61.5	******	0.477	******
1015	45.	85.2	63.0	******	0.506	******
1030	60.	85.5	64.0	17.70	0.484	20.00
1045	75.	86.2	64.0	******	******	******
1100	90.	86.5	64.5	******	******	******
1115	105.	86.5	64.5	******	******	******
1130	120.	86.0	64.0	17.40	0.472	20.00
1145	135.	86.2	64.0	******	******	******
1200	150.	86.2	64.0	******	******	******
1215	165.	86.5	64.0	******	0.484	******
1230	180.	86.2	64.0	17.50	0.472	20.00
1245	195.	86.5	63.5	******	******	******
1300	210.	86.5	63.5	******	******	******
1315	225.	86.7	63.5	******	******	******
1330	240.	86.5	63.5	17.00	0.455	20.00
1345	255.	86.5	63.5	******	******	******
1400	270.	86.7	63.5	******	******	******
1415	285.	86.5	63.0	******	0.477	******
1430	300.	86.7	63.0	17.70	0.472	20.00
1445	315.	86.7	63.0	******	0.467	******
1500	330.	87.2	63.5	******	0.479	******
1515	345.	86.5	63.0	******	0.460	******
1530	360.	86.7	63.0	17.40	0.467	20.00

EC -157
TRANS-2-BUTENE
1976 MAY 5

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER
AEROSPACE PNFM ON CHAMBER, 0.6 L/MIN
PPN POSSIBLY DUE TO CONTAMINATION FROM PREVIOUS RUN
CO FACTOR 2.2/1.22
RADIOMETER CORRECTION -0.014 MW/CM2

T=0 AT 945 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.5
REL HUM	%	AVERAGE	63.99
SSPOWER	KW	AVERAGE	17.41
RADIOM	MW/CM2	AVERAGE	0.486
H2O	PPM	AVERAGE	2.747E 04
NO	PPM	INIT COND	0.397
NO2-CORR	PPM	INIT COND	0.129
HCHO	PPM	INIT COND	0.010
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003
T2-C4=	PPM	INIT COND	0.216

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.406
430.	2.116
403.	1.724
380.	1.634
370.	1.398
360.	1.171
350.	1.000
340.	0.697
330.	0.462
320.	0.236
310.	0.082
300.	0.014
290.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 2.378 L/MIN

47 GC SAMPLES TAKEN

EC -157
TRANS-2-BUTENE
1976 MAY 5

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	T2-C4= PPM
945	0.	0.0	0.397	0.129	0.525	0.216
1000	15.	0.002	0.283	0.223	0.510	0.142
1015	30.	0.015	0.206	0.278	0.486	0.091
1030	45.	0.034	0.154	0.299	0.455	0.054
1045	60.	0.044	0.125	0.305	0.429	0.031
1100	75.	0.054	0.104	0.303	0.406	0.017
1115	90.	0.054	0.092	0.298	0.391	0.009
1130	105.	0.073	0.087	0.288	0.375	0.005
1145	120.	0.083	0.074	0.287	0.363	0.002
1200	135.	0.093	0.066	0.283	0.349	0.001
1215	150.	0.085	0.062	0.275	0.337	0.001
1230	165.	0.107	0.057	0.271	0.328	0.001
1245	180.	0.112	0.054	0.261	0.316	0.001
1300	195.	0.122	0.050	0.255	0.305	0.000
1315	210.	0.129	0.053	0.241	0.295	0.000
1330	225.	0.132	0.048	0.237	0.286	0.000
1345	240.	0.144	0.043	0.235	0.279	0.000
1400	255.	0.147	0.040	0.228	0.268	0.000
1415	270.	0.159	0.038	0.219	0.257	0.000
1430	285.	0.166	0.037	0.210	0.247	0.001
1445	300.	0.176	0.033	0.205	0.239	0.000
1500	315.	0.178	0.032	0.198	0.230	0.000
1515	330.	0.183	0.029	0.192	0.221	0.000
1530	345.	******	0.029	0.180	0.210	0.000
1545	360.	0.205	0.027	0.171	0.200	0.000

EC -157
TRANS-2-BUTENE
1976 MAY 5

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM
945	0.	******	0.000	0.010	0.001	0.0002	0.0028	0.0002	0.0001	0.0
1000	15.	2.08	******	******	******	******	******	******	******	******
1015	30.	2.10	0.007	******	0.161	******	0.0044	0.0002	0.0011	0.0
1030	45.	2.10	******	******	******	******	******	******	******	******
1045	60.	2.12	0.023	0.012	0.220	0.0006	0.0080	0.0003	0.0017	0.0005
1100	75.	2.22	******	******	******	******	******	******	******	******
1115	90.	2.11	0.034	******	0.214	0.0007	0.0076	0.0004	0.0020	0.0011
1130	105.	2.16	******	******	******	******	******	******	******	******
1145	120.	2.21	0.039	0.020	0.205	0.0010	0.0105	0.0005	0.0021	0.0015
1200	135.	2.21	******	******	******	******	******	******	******	******
1215	150.	2.22	0.042	******	0.166	0.0010	0.0060	0.0006	0.0019	0.0015
1230	165.	2.27	******	******	******	******	******	******	******	******
1245	180.	2.27	0.045	0.024	0.171	0.0014	0.0104	0.0006	0.0019	0.0019
1300	195.	2.28	******	******	******	******	******	******	******	******
1315	210.	2.28	0.047	******	0.145	0.0014	0.0102	0.0007	0.0019	0.0019
1330	225.	2.37	******	******	******	******	******	******	******	******
1345	240.	2.31	0.047	0.020	0.127	0.0014	0.0082	0.0007	0.0016	0.0016
1400	255.	2.36	******	******	******	******	******	******	******	******
1415	270.	2.40	0.049	******	0.127	0.0019	0.0128	0.0009	0.0020	0.0016
1430	285.	2.38	******	******	******	******	******	******	******	******
1445	300.	2.40	0.050	0.028	0.112	0.0021	0.0176	0.0010	0.0019	0.0022
1500	315.	2.44	******	******	******	******	******	******	******	******
1515	330.	2.50	0.050	******	0.104	0.0024	0.0158	0.0009	0.0017	0.0022
1530	345.	2.46	******	******	******	******	******	******	******	******
1545	360.	2.53	0.052	0.022	0.090	0.0025	0.0147	0.0011	0.0017	0.0022

EC -157
TRANS-2-BUTENE
1976 MAY 5

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	81.6	51.5	******	******	20.00
1000	15.	85.5	60.0	******	0.484	******
1015	30.	85.7	64.5	17.20	0.480	******
1030	45.	85.5	66.0	******	0.472	******
1045	60.	85.7	66.0	17.40	0.484	20.00
1100	75.	86.5	66.5	******	******	******
1115	90.	87.0	66.5	******	******	******
1130	105.	87.4	66.5	******	0.511	******
1145	120.	87.2	66.5	17.40	0.480	20.00
1200	135.	87.2	66.5	******	0.484	******
1215	150.	87.0	66.0	******	0.492	******
1230	165.	87.0	66.0	******	******	******
1245	180.	86.7	66.0	17.30	0.470	20.00
1300	195.	86.5	65.5	******	0.484	******
1315	210.	87.0	65.5	17.30	0.489	******
1330	225.	87.0	65.5	******	0.484	******
1345	240.	87.0	65.5	17.60	0.484	20.00
1400	255.	87.2	65.0	******	0.484	******
1415	270.	87.2	64.5	17.50	0.480	******
1430	285.	87.4	64.5	******	0.489	******
1445	300.	87.2	64.5	17.50	0.482	20.00
1500	315.	87.2	64.5	******	0.482	******
1515	330.	87.4	64.5	******	0.484	******
1530	345.	87.2	64.5	******	0.487	******
1545	360.	87.4	64.0	17.50	0.484	20.00

EC -160
ETHENE + PROPENE
1976 MAY 10

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER
ESTIMATE ETOX = 1 PPB AT 1530 HOURS
CO FACTOR 2.2/1.23
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 930 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	302.7
REL HUM	%	AVERAGE	64.48
SSPOWER	KW	AVERAGE	17.43
RADIOM	MW/CM2	AVERAGE	0.520
H_2O	PPM	AVERAGE	2.639E 04
NO	PPM	INIT COND	0.752
NO2-CORR	PPM	INIT COND	0.241
CO	PPM	INIT COND	2.136
HCHO	PPM	INIT COND	0.004
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.003
PROX	PPM	INIT COND	0.001
ETHENE	PPM	INIT COND	1.014
PROPENE	PPM	INIT COND	0.400

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.514
430.	2.228
403.	2.004
380.	1.674
370.	1.448
360.	1.193
350.	1.000
340.	0.703
330.	0.467
320.	0.230
310.	0.086
300.	0.022
290.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.736 L/MIN

66 GC SAMPLES TAKEN

EC -160
ETHENE + PROPENE
1976 MAY 10

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM
930	0.	0.0	0.752	0.241	0.994	1.014	0.400
945	15.	0.0	0.613	0.350	0.963	0.960	0.362
1000	30.	0.005	0.501	0.440	0.940	0.920	0.312
1015	45.	0.010	0.398	0.510	0.908	0.888	0.271
1030	60.	0.015	0.305	0.567	0.875	0.858	0.253
1045	75.	0.032	0.237	0.607	0.846	0.824	0.227
1100	90.	0.046	0.186	0.627	0.815	0.796	0.189
1115	105.	0.073	0.147	0.631	0.780	0.766	0.168
1130	120.	0.105	0.120	0.623	0.743	0.735	0.147
1145	135.	0.132	0.085	0.620	0.705	0.712	0.128
1200	150.	0.171	0.073	0.597	0.672	0.685	0.112
1215	165.	0.215	0.059	0.572	0.633	0.655	0.095
1230	180.	0.256	0.049	0.535	0.586	0.625	0.079
1245	195.	0.300	0.039	0.497	0.533	0.598	0.063
1300	210.	0.344	0.032	0.458	0.490	0.570	0.053
1315	225.	0.386	0.027	0.416	0.447	0.542	0.042
1330	240.	0.432	0.024	0.378	0.395	0.510	0.034
1345	255.	0.489	0.020	0.324	0.346	0.478	0.026
1400	270.	0.547	0.020	0.280	0.297	0.448	0.019
1415	285.	0.601	0.015	0.232	0.247	0.419	0.014
1430	300.	0.662	0.015	0.184	0.199	0.395	0.009
1445	315.	0.723	0.012	0.146	0.155	0.361	0.006
1500	330.	0.782	0.010	0.107	0.119	0.329	0.005
1515	345.	0.833	0.010	0.070	0.080	0.306	0.003
1530	360.	0.874	0.010	0.038	0.048	0.278	0.002

EC -160
ETHENE + PROPENE
1976 MAY 10

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	PROX PPM	ME-N PPM
930	0.	2.14	0.000	0.004	0.002	0.0002	0.0033	0.0002	0.0007	0.0
945	15.	2.19	******	******	******	******	******	******	******	******
1000	30.	2.18	0.002	******	0.054	0.0012	0.0043	0.0002	0.0008	0.0
1015	45.	2.21	******	******	******	******	******	******	******	******
1030	60.	2.21	0.014	0.187	0.101	0.0024	0.0054	0.0003	0.0021	0.0
1045	75.	2.39	******	******	******	******	******	******	******	******
1100	90.	2.47	0.017	******	0.117	0.0035	0.0069	0.0004	0.0032	0.0009
1115	105.	2.54	******	******	******	******	******	******	******	******
1130	120.	2.62	0.028	0.326	0.140	0.0044	0.0086	0.0006	******	0.0015
1145	135.	2.70	******	******	******	******	******	******	******	******
1200	150.	2.77	0.039	******	0.130	0.0049	0.0094	0.0009	0.0047	0.0020
1215	165.	2.83	******	******	******	******	******	******	******	******
1230	180.	2.88	0.054	0.381	0.145	0.0058	0.0108	0.0012	0.0049	0.0025
1245	195.	2.93	******	******	******	******	******	******	******	******
1300	210.	2.98	0.066	******	0.139	0.0059	0.0103	0.0016	0.0050	0.0030
1315	225.	3.03	******	******	******	******	******	******	******	******
1330	240.	3.15	0.078	0.282	0.140	0.0069	0.0159	0.0019	0.0055	0.0032
1345	255.	3.20	******	******	******	******	******	******	******	******
1400	270.	3.27	0.098	******	0.115	0.0068	0.0173	0.0024	0.0051	0.0036
1415	285.	3.36	******	******	******	******	******	******	******	******
1430	300.	3.43	0.120	******	0.096	0.0067	0.0124	0.0027	0.0046	0.0032
1445	315.	3.50	******	******	******	******	******	******	******	******
1500	330.	3.58	0.134	******	0.088	0.0063	0.0189	0.0034	0.0056	0.0036
1515	345.	3.73	******	******	******	******	******	******	******	******
1530	360.	3.73	0.158	0.499	0.075	0.0091	0.0272	0.0036	0.0061	0.0043

EC -160
ETHENE + PROPENE
1976 MAY 10

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	80.1	51.0	17.90	******	20.00
945	15.	83.3	54.5	******	0.494	******
1000	30.	83.5	61.0	******	0.497	******
1015	45.	84.3	65.0	******	0.507	******
1030	60.	84.5	65.5	18.40	0.507	20.00
1045	75.	84.3	67.5	******	0.497	******
1100	90.	84.8	66.0	******	0.499	******
1115	105.	85.2	68.5	******	******	******
1130	120.	85.0	68.5	18.00	0.485	20.00
1145	135.	85.2	67.5	******	******	******
1200	150.	86.0	67.5	******	******	******
1215	165.	86.2	67.0	******	******	******
1230	180.	86.2	67.0	17.90	0.480	20.00
1245	195.	85.5	66.5	******	******	******
1300	210.	85.5	66.5	******	******	******
1315	225.	85.2	67.0	******	******	******
1330	240.	85.5	66.5	17.90	0.480	20.00
1345	255.	86.0	66.0	******	0.494	******
1400	270.	86.5	66.0	******	0.492	******
1415	285.	85.5	65.5	******	0.492	******
1430	300.	85.2	65.0	18.10	0.489	******
1445	315.	85.7	65.0	******	******	******
1500	330.	85.7	65.0	******	******	******
1515	345.	85.7	65.0	******	0.502	******
1530	360.	86.2	64.5	13.80	0.497	20.00

EC -161
FOUR ALKENES
1976 MAY 11

BEGIN IRRADIATION 0900; 0.25 INCH PYREX FILTER
CO FACTOR 2.2/1.32
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 900 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	77.46
SSPOWER	KW	AVERAGE	17.97
RADIUM	MW/CM2	AVERAGE	0.489
H2O	PPM	AVERAGE	3.257E 04
NO	PPM	INIT COND	0.386
NO2-CORR	PPM	INIT COND	0.123
ETHENE	PPM	INIT COND	0.908
PROPENE	PPM	INIT COND	0.102
1-C4=	PPM	INIT COND	0.189
T2-C4=	PPM	INIT COND	0.088
CO	PPM	INIT COND	2.158
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.434
430.	2.162
403.	1.911
380.	1.706
370.	1.422
360.	1.173
350.	1.000
340.	0.727
330.	0.485
320.	0.266
310.	0.047
300.	0.017
290.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 1.742 L/MIN

75 GC SAMPLES TAKEN

EC -161
FOUR ALKENES
1976 MAY 11

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	1-C4= PPM	T2-C4= PPM
900	0.	0.0	0.3E6	0.123	0.510	0.908	0.102	0.189	0.088
915	15.	0.012	C.244	C.249	0.492	0.872	0.090	0.167	0.061
930	30.	0.056	0.109	0.353	0.463	0.827	0.068	0.129	0.027
945	45.	0.161	0.053	0.369	0.418	0.777	0.062	0.108	0.012
1000	60.	0.249	C.032	0.343	0.376	0.730	0.050	0.084	0.002
1015	75.	0.352	0.023	0.313	0.337	0.701	0.042	0.068	******
1030	90.	0.423	C.018	0.275	0.293	0.664	0.032	0.053	0.000
1045	105.	0.513	0.015	0.239	0.254	0.616	0.025	0.040	0.000
1100	120.	0.586	C.012	0.201	0.213	0.564	0.018	0.028	0.000
1115	135.	0.662	0.010	0.167	0.177	0.543	0.015	0.023	0.000
1130	150.	0.728	C.010	0.134	0.144	0.506	0.010	0.016	0.000
1145	165.	0.784	C.007	0.096	0.107	0.483	0.008	0.011	0.000
1200	180.	0.823	0.007	0.061	0.069	0.438	0.006	0.008	0.000
1215	195.	0.846	C.007	0.043	0.051	0.409	0.004	0.005	0.000
1230	210.	0.857	0.007	0.030	0.037	0.378	0.003	0.004	0.000
1245	225.	0.857	C.CC7	0.020	0.029	0.360	0.002	0.003	0.000
1300	240.	0.850	C.007	0.014	0.020	0.345	0.002	0.002	0.000
1315	255.	0.833	0.006	C.010	0.016	0.323	0.001	0.002	0.000
1330	270.	0.823	0.006	0.007	0.014	0.302	0.001	0.001	******
1345	285.	0.809	0.006	0.008	0.015	0.291	0.001	0.001	0.000
1400	300.	0.796	0.007	0.011	0.018	0.277	0.000	0.001	0.000
1415	315.	0.784	0.006	C.008	0.014	0.269	0.000	0.001	0.000
1430	330.	0.769	0.006	0.011	0.017	0.248	0.000	0.000	0.000
1445	345.	0.760	0.006	0.006	0.012	0.236	0.000	0.000	0.000
1500	360.	******	******	******	******	0.225	0.000	0.000	0.000

EC -161
FOUR ALKENES
1976 MAY 11

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	PPN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	C2-N PPM
900	0.	2.16	0.000	0.000	0.0	0.002	0.0003	0.0023	0.0002	0.0001	0.0	0.0
915	15.	2.14	******	******	******	******	******	******	******	******	******	******
930	30.	2.15	0.007	0.003	******	0.081	0.0406	******	0.0006	0.0006	0.0	0.0
945	45.	2.24	******	******	******	******	******	******	******	******	******	******
1000	60.	2.31	0.028	0.015	0.211	0.112	0.0625	******	0.0016	0.0009	0.0	0.0
1015	75.	2.35	******	******	******	******	******	******	******	******	******	******
1030	90.	2.38	0.047	0.028	******	0.133	0.0783	******	0.0023	0.0006	0.0007	0.0
1045	105.	2.48	******	******	******	******	******	******	******	******	******	******
1100	120.	2.54	0.069	0.029	0.322	0.112	0.0713	******	0.0028	0.0009	0.0005	0.0
1115	135.	2.66	******	******	******	******	******	******	******	******	******	******
1130	150.	2.73	0.079	0.036	******	0.108	0.0701	******	0.0032	0.0009	0.0011	0.0
1145	165.	2.77	******	******	******	******	******	******	******	******	******	******
1200	180.	2.90	0.104	0.046	0.411	0.101	0.0601	0.0165	0.0034	0.0009	0.0011	0.0
1215	195.	2.92	******	******	******	******	******	******	******	******	******	******
1230	210.	3.07	0.117	0.048	******	0.089	0.0511	******	0.0032	0.0009	0.0011	0.0003
1245	225.	3.07	******	******	******	******	******	******	******	******	******	******
1300	240.	3.13	0.125	0.050	0.423	0.060	0.0337	******	0.0023	0.0010	0.0011	0.0005
1315	255.	3.15	******	******	******	******	******	******	******	******	******	******
1330	270.	3.26	0.125	0.051	******	0.089	0.0419	******	0.0030	0.0010	0.0011	0.0005
1345	285.	3.23	******	******	******	******	******	******	******	******	******	******
1400	300.	3.32	0.122	0.048	0.322	0.083	0.0358	******	0.0029	0.0010	0.0011	0.0003
1415	315.	3.36	******	******	******	******	******	******	******	******	******	******
1430	330.	3.43	0.117	0.049	******	0.078	0.0344	0.0291	0.0029	0.0010	0.0011	0.0003
1445	345.	3.45	******	******	******	******	******	******	******	******	******	******
1500	360.	******	0.120	0.052	******	0.071	0.0282	0.0258	0.0031	0.0011	0.0006	0.0003

EC -161
FOUR ALKENES
1976 MAY 11

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kh	RADIOM MW/CM2	HCHO VOL L
900	0.	84.5	50.0	******	0.504	20.00
915	15.	89.2	48.5	******	0.487	******
930	30.	86.5	51.5	18.10	0.492	******
945	45.	86.5	56.5	******	0.499	******
1000	60.	86.2	60.0	18.10	0.494	20.00
1015	75.	87.2	65.5	******	0.511	******
1030	90.	87.4	72.0	******	0.507	******
1045	105.	87.2	75.5	******	0.487	******
1100	120.	87.2	80.0	18.00	0.497	20.00
1115	135.	87.0	85.5	******	0.492	******
1130	150.	86.5	86.0	******	0.489	******
1145	165.	86.5	86.5	******	******	******
1200	180.	86.0	85.5	17.90	0.492	20.00
1215	195.	86.2	86.0	******	******	******
1230	210.	86.2	87.0	******	******	******
1245	225.	86.0	86.5	******	******	******
1300	240.	86.0	86.5	17.90	0.482	20.00
1315	255.	85.2	86.5	******	0.475	******
1330	270.	85.2	86.0	******	0.472	******
1345	285.	84.5	86.5	******	0.472	******
1400	300.	84.5	86.5	17.80	0.472	20.00
1415	315.	85.0	88.5	******	0.475	******
1430	330.	84.5	86.0	******	0.475	******
1445	345.	84.3	88.0	******	0.482	******
1500	360.	******	******	18.00	******	******

EC -102
N-BUTANE
1976 MAY 12

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	83.8	47.5	******	0.489	20.00
945	15.	85.0	50.5	******	0.489	******
1000	30.	84.3	57.0	18.00	0.497	******
1015	45.	84.8	70.0	******	0.484	******
1030	60.	85.0	81.0	18.10	0.502	20.00
1045	75.	85.5	84.0	******	0.507	******
1100	90.	86.2	85.5	******	******	******
1115	105.	86.2	86.0	******	******	******
1130	120.	85.5	86.0	18.10	******	20.00
1145	135.	85.7	86.0	******	0.484	******
1200	150.	86.0	85.5	******	0.477	******
1215	165.	86.0	85.5	******	******	******
1230	180.	******	******	******	******	20.00
1245	195.	******	******	******	******	******
1300	210.	******	******	******	******	******
1315	225.	******	******	******	******	******
1330	240.	******	******	******	******	20.00
1345	255.	******	******	******	******	******
1400	270.	86.2	81.5	******	0.577	******
1415	285.	85.7	79.0	******	0.572	******
1430	300.	86.0	80.5	******	0.472	20.00
1445	315.	86.2	80.5	******	0.472	******
1500	330.	86.5	80.0	******	0.467	******
1515	345.	86.0	79.5	******	0.467	******
1530	360.	86.5	79.5	20.10	0.460	20.00

EC -162
N-BUTANE
1976 MAY 12

CLOCK TIME	ELAPSED T(MIN)	C4-N-1 PPM C-600	C4-N-1 PPM PANALYZR
930	0.	0.0	0.0
945	15.	******	******
1000	30.	0.0005	0.0
1015	45.	******	******
1030	60.	0.0005	0.0005
1045	75.	******	******
1100	90.	0.0006	0.0016
1115	105.	******	******
1130	120.	0.0006	0.0016
1145	135.	******	******
1200	150.	0.0009	0.0019
1215	165.	******	******
1230	180.	0.0013	******
1245	195.	******	******
1300	210.	0.0008	0.0020
1315	225.	******	******
1330	240.	0.0013	0.0024
1345	255.	******	******
1400	270.	0.0014	0.0027
1415	285.	******	******
1430	300.	0.0016	0.0027
1445	315.	******	******
1500	330.	0.0016	0.0027
1515	345.	******	******
1530	360.	0.0017	0.0027

EC -162
N-BUTANE
1976 MAY 12

CLOCK TIME	ELAPSED TIME(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	C2-N PPM	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR
930	0.	2.09	0.000	0.020	******	0.0001	0.0018	0.0002	0.0001	0.0	0.0	0.0	0.0
945	15.	2.07	******	******	******	******	******	******	******	******	******	******	******
1000	30.	2.15	0.001	******	0.0139	0.0004	0.0025	0.0009	0.0147	0.0	0.0	0.0022	0.0021
1015	45.	2.12	******	******	******	******	******	******	******	******	******	******	******
1030	60.	2.15	0.002	0.006	0.0235	0.0005	0.0027	0.0013	0.0238	0.0	0.0	0.0043	0.0043
1045	75.	2.13	******	******	******	******	******	******	******	******	******	******	******
1100	90.	2.13	0.003	******	0.0316	0.0007	0.0030	0.0015	0.0322	0.0	0.0	0.0050	0.0062
1115	105.	2.14	******	******	******	******	******	******	******	******	******	******	******
1130	120.	2.24	0.003	0.0	0.0385	0.0010	0.0030	0.0021	0.0358	0.0	0.0	0.0068	0.0076
1145	135.	2.23	******	******	******	******	******	******	******	******	******	******	******
1200	150.	2.26	0.004	******	0.0396	0.0009	0.0032	0.0017	0.0408	0.0	0.0005	0.0071	0.0089
1215	165.	2.32	******	******	******	******	******	******	******	******	******	******	******
1230	180.	******	0.005	0.0	0.0535	0.0014	0.0039	0.0026	0.0506	0.0	0.0003	0.0083	0.0098
1245	195.	******	******	******	******	******	******	******	******	******	******	******	******
1300	210.	******	0.006	******	0.0539	0.0015	0.0037	0.0026	0.0468	0.0	0.0003	0.0099	0.0107
1315	225.	******	******	******	******	******	******	******	******	******	******	******	******
1330	240.	******	0.008	0.024	0.0664	0.0017	0.0061	0.0028	0.0674	0.0002	0.0004	0.0089	0.0115
1345	255.	******	******	******	******	******	******	******	******	******	******	******	******
1400	270.	2.43	0.008	******	0.0939	0.0021	0.0068	0.0025	0.0652	0.0001	0.0005	0.0101	0.0128
1415	285.	2.40	******	******	******	******	******	******	******	******	******	******	******
1430	300.	2.43	0.013	0.028	0.0888	0.0021	0.0045	0.0030	0.0591	0.0003	0.0005	0.0141	0.0135
1445	315.	2.43	******	******	******	******	******	******	******	******	******	******	******
1500	330.	2.47	0.014	******	0.0925	0.0024	0.0049	0.0032	0.0647	0.0005	0.0006	0.0132	0.0141
1515	345.	2.45	******	******	******	******	******	******	******	******	******	******	******
1530	360.	2.49	0.015	0.020	0.0977	0.0025	0.0053	0.0031	0.0675	0.0005	0.0005	0.0136	0.0149

EC -162
N-BUTANE
1976 MAY 12

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM
930	0.	0.0	C.383	0.122	0.506	2.05
945	15.	0.002	C.347	0.148	0.496	2.00
1000	30.	0.002	C.319	0.169	0.487	1.97
1015	45.	0.007	0.289	0.189	0.480	1.93
1030	60.	0.010	C.266	0.205	0.472	1.92
1045	75.	0.012	C.245	0.215	0.462	1.90
1100	90.	0.015	C.223	0.229	0.454	1.89
1115	105.	0.015	C.208	0.240	0.447	1.87
1130	120.	0.017	C.193	0.242	0.435	1.84
1145	135.	0.022	C.177	0.250	0.426	1.82
1200	150.	0.024	C.166	0.259	0.425	1.81
1215	165.	0.029	C.156	0.259	0.415	1.80
1230	180.	******	******	******	******	1.77
1245	195.	******	******	******	******	1.75
1300	210.	******	******	******	******	1.73
1315	225.	******	******	******	******	1.73
1330	240.	******	******	******	******	1.72
1345	255.	******	******	******	******	1.70
1400	270.	0.066	C.094	C.279	0.374	1.68
1415	285.	0.073	C.087	0.275	0.363	1.67
1430	300.	0.081	0.079	0.273	0.354	1.65
1445	315.	0.086	0.072	0.269	0.341	1.64
1500	330.	0.098	0.070	0.259	0.334	1.63
1515	345.	0.103	C.062	0.261	0.327	1.60
1530	360.	0.112	0.065	0.258	0.323	1.59

EC -162
N-BUTANE
1976 MAY 12

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER
C4-N DATA FROM C-600 CONSIDERED MORE RELIABLE THAN FROM ANALYZER
CJ FACTOR 2.2/1.32
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 930 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	77.68
SSPUMER	KW	AVERAGE	18.57
RADIOM	MW/CM2	AVERAGE	0.512
H2O	PPM	AVERAGE	4.9C4E 04
NO	PPM	INIT COND	0.383
NO2-CORR	PPM	INIT COND	0.122
N-C4	PPM	INIT COND	2.050
CO	PPM	INIT COND	2.092
HCHO	PPM	INIT COND	0.020
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.686
430.	2.679
403.	2.346
380.	1.795
370.	1.504
360.	1.213
350.	1.000
340.	0.658
330.	0.397
320.	0.202
310.	0.087
300.	0.011
290.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.763 L/MIN

34 GC SAMPLES TAKEN

EC -163
N-BUTANE + ACETALDEHYDE
1976 MAY 13

BEGIN IRRADIATION 1030; 0.25 INCH PYREX FILTER
CO FACTOR 2.2/1.33
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 1030 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	301.7
REL HUM	%	AVERAGE	74.94
SSPOWER	KW	AVERAGE	18.09
RADIOM	MW/CM2	AVERAGE	0.547
H2O	PPM	AVERAGE	2.914E 04
NO	PPM	INIT COND	0.377
NO2-CORR	PPM	INIT COND	0.113
N-C4	PPM	INIT COND	1.578
ACETALD	PPM	INIT COND	0.526
CO	PPM	INIT COND	2.186
PAN	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	3.753
430.	2.626
403.	2.315
380.	1.794
370.	1.473
360.	1.187
350.	1.000
340.	0.687
330.	0.421
320.	0.199
310.	0.065
300.	0.010
290.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 1.782 L/MIN

53 GC SAMPLES TAKEN

EC -163
N-BUTANE + ACETALDEHYDE
1976 MAY 13

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM	ACETALD PPM
1030	0.	0.0	0.377	0.113	0.490	1.98	0.526
1045	15.	0.007	0.280	0.188	0.469	1.93	******
1100	30.	0.012	0.219	0.230	0.448	1.89	0.384
1115	45.	0.020	0.170	0.262	0.434	1.88	******
1130	60.	0.032	0.137	0.281	0.419	1.87	0.371
1145	75.	0.049	0.118	0.286	0.403	1.83	******
1200	90.	0.064	0.098	0.294	0.391	1.82	0.370
1215	105.	0.083	0.078	0.299	0.378	1.80	******
1230	120.	0.093	0.076	0.284	0.365	1.79	0.295
1245	135.	******	******	******	******	1.78	******
1300	150.	******	******	******	******	1.76	0.299
1315	165.	******	******	******	******	1.75	******
1330	180.	0.178	0.046	0.262	0.310	1.73	0.309
1345	195.	0.195	0.039	0.259	0.297	1.70	******
1400	210.	0.217	0.034	0.244	0.282	1.70	0.307
1415	225.	0.234	0.033	0.233	0.267	1.68	******
1430	240.	0.256	0.031	0.224	0.255	1.67	0.281
1445	255.	0.278	0.028	0.209	0.237	1.66	******
1500	270.	0.298	0.027	0.192	0.219	1.65	0.316
1515	285.	0.318	0.024	0.179	0.203	1.62	******
1530	300.	0.340	0.022	0.164	0.187	1.60	0.260
1545	315.	0.362	0.021	0.151	0.171	1.60	******
1600	330.	0.386	0.018	0.137	0.153	1.57	0.229
1615	345.	0.405	0.017	0.125	0.143	1.55	******
1630	360.	0.430	0.016	0.115	0.131	1.56	0.255

EC -163
N-BUTANE + ACETALDEHYDE
1976 MAY 13

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	C4-N-2 PPM C-600	C4-N-1 PPM C-600
1030	0.	2.19	0.001	0.0	******	0.0021	******	******	0.0	0.0	0.0
1045	15.	2.21	******	******	******	******	******	******	******	******	******
1100	30.	2.15	0.016	******	******	0.0019	0.0009	0.0038	0.0	0.0032	******
1115	45.	2.20	******	******	******	******	******	******	******	******	******
1130	60.	2.21	0.028	0.010	******	0.0024	0.0013	0.0224	0.0005	0.0042	0.0004
1145	75.	2.20	******	******	******	******	******	******	******	******	******
1200	90.	2.28	0.035	******	0.0009	0.0030	0.0018	0.0309	0.0008	0.0052	0.0007
1215	105.	2.26	******	******	******	******	******	******	******	******	******
1230	120.	2.25	0.045	0.006	0.0010	0.0026	0.0017	0.0300	0.0011	0.0068	0.0006
1245	135.	******	******	******	******	******	******	******	******	******	******
1300	150.	******	0.054	******	0.0015	0.0042	0.0025	0.0429	0.0014	0.0077	0.0007
1315	165.	******	******	******	******	******	******	******	******	******	******
1330	180.	2.34	0.062	******	0.0020	0.0049	0.0028	0.0493	0.0016	0.0090	0.0007
1345	195.	2.46	******	******	******	******	******	******	******	******	******
1400	210.	2.39	0.071	******	0.0022	0.0057	0.0031	0.0517	0.0019	0.0089	0.0011
1415	225.	2.51	******	******	******	******	******	******	******	******	******
1430	240.	2.45	0.077	0.014	0.0028	0.0061	0.0034	0.0567	0.0019	0.0102	0.0013
1445	255.	2.44	******	******	******	******	******	******	******	******	******
1500	270.	2.52	0.087	******	0.0033	0.0107	0.0038	0.0773	0.0022	0.0115	0.0011
1515	285.	2.47	******	******	******	******	******	******	******	******	******
1530	300.	2.49	0.097	0.022	0.0036	0.0076	0.0039	0.0658	0.0024	0.0119	0.0016
1545	315.	2.59	******	******	******	******	******	******	******	******	******
1600	330.	2.57	0.106	******	0.0038	0.0075	0.0041	0.0682	0.0023	0.0140	0.0014
1615	345.	2.57	******	******	******	******	******	******	******	******	******
1630	360.	2.62	******	0.0	0.0044	0.0141	0.0045	******	******	0.0135	0.0013

EC -163
N-BUTANE + ACETALDEHYDE
1976 MAY 13

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1030	0.	82.8	45.5	18.10	0.475	15.00
1045	15.	84.5	48.5	******	0.499	******
1100	30.	84.3	60.0	******	0.492	******
1115	45.	84.3	75.5	******	0.485	******
1130	60.	84.0	79.5	******	0.489	20.00
1145	75.	84.3	81.5	******	0.516	******
1200	90.	84.5	83.0	18.20	0.497	******
1215	105.	85.2	82.5	******	0.499	******
1230	120.	85.5	83.0	18.10	0.499	20.00
1245	135.	******	******	******	******	******
1300	150.	******	******	******	******	******
1315	165.	******	******	******	******	******
1330	180.	85.2	82.0	18.10	******	20.00
1345	195.	85.2	82.0	******	******	******
1400	210.	85.5	81.0	******	******	******
1415	225.	85.5	81.0	******	******	******
1430	240.	85.5	80.5	17.90	0.480	20.00
1445	255.	85.2	80.0	******	******	******
1500	270.	84.5	80.0	******	******	******
1515	285.	85.0	79.5	******	******	******
1530	300.	85.0	79.5	18.30	0.499	20.00
1545	315.	85.2	79.0	17.90	0.485	******
1600	330.	85.0	79.0	******	0.480	******
1615	345.	85.2	78.0	******	0.460	******
1630	360.	85.7	78.0	******	0.480	20.00

EC -164
ACETALDEHYDE
1976 MAY 17

BEGIN IRRADIATION 1015: 0.25 INCH PYREX FILTER
TEMPERATURE CONTROL FAILURE: TEMPERATURE INCREASED THROUGHOUT RUN
CU FACTOR 2.2/1.32
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 1015 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	3

TS	DEG K	AVERAGE	307.1
REL HUM	%	AVERAGE	65.67
SSPOWER	KW	AVERAGE	16.57
RADIOM	MW/CM2	AVERAGE	0.504
H2O	PPM	AVERAGE	2.435E 04
NO	PPM	INIT CONC	0.388
NO2-CORR	PPM	INIT CONC	0.118
ACETALD	PPM	INIT CONC	0.340
CO	PPM	INIT CONC	2.109
ACETONE	PPM	INIT CONC	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	3.670
430.	2.575
403.	2.295
380.	1.770
370.	1.465
360.	1.191
350.	1.000
340.	0.699
330.	0.427
320.	0.192
310.	0.082
300.	0.011
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.762 L/MIN

24 GC SAMPLES TAKEN

EC -164
ACETALDEHYDE
1976 MAY 17

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ACETALD PPM	CO PPM	PAN PPM	HCHO PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	ME-N PPM
1015	0.	0.0	0.388	0.118	0.506	0.340	2.11	0.000	******	******	0.0013	******	0.0
1030	15.	0.002	0.360	0.137	0.497	******	2.09	******	******	******	******	******	******
1045	30.	0.002	0.321	0.165	0.487	0.245	2.11	0.000	******	******	******	0.0001	0.0
1100	45.	0.005	0.280	0.191	0.477	******	2.11	******	******	******	******	******	******
1115	60.	0.007	0.261	0.204	0.467	0.216	2.12	0.011	0.030	******	0.0022	0.0001	0.0004
1130	75.	0.010	0.237	0.221	0.458	******	2.15	******	******	******	******	******	******
1145	90.	0.012	0.216	0.233	0.449	0.182	2.18	0.011	******	******	0.0030	0.0001	0.0005
1200	105.	0.020	0.198	0.240	0.438	******	******	******	******	******	******	******	******
1215	120.	0.022	0.182	0.245	0.427	0.168	******	0.017	******	0.0000	0.0036	0.0002	0.0006
1230	135.	0.024	0.164	0.252	0.416	******	******	******	******	******	******	******	******
1245	150.	0.027	0.154	0.254	0.408	0.158	******	0.019	******	0.0000	0.0041	0.0002	0.0011
1300	165.	0.032	0.144	0.255	0.399	******	******	******	******	******	******	******	******
1315	180.	0.037	0.134	0.255	0.390	0.132	******	0.021	0.272	0.0007	0.0037	0.0003	0.0013
1330	195.	0.039	0.125	0.255	0.381	******	******	******	******	******	******	******	******
1345	210.	0.042	0.116	0.259	0.375	0.127	******	0.021	******	0.0008	0.0046	0.0003	0.0011
1400	225.	0.049	0.110	0.253	0.363	******	2.38	******	******	******	******	******	******
1415	240.	0.054	0.100	0.255	0.355	0.110	2.39	0.026	******	0.0008	0.0051	0.0004	0.0015
1430	255.	0.056	0.107	0.242	0.350	******	2.40	******	******	******	******	******	******
1445	270.	0.061	0.090	0.251	0.342	0.104	2.45	******	******	0.0009	0.0053	0.0004	******
1500	285.	0.064	0.085	0.248	0.334	******	2.45	0.023	******	******	******	******	0.0016
1515	300.	0.066	0.078	0.252	0.330	0.093	2.52	0.024	0.050	0.0010	0.0060	0.0004	0.0019
1530	315.	0.071	0.079	0.242	0.321	******	2.51	******	******	******	******	******	******
1545	330.	0.081	0.073	0.238	0.310	0.081	2.51	0.024	******	0.0011	0.0073	0.0005	0.0019
1600	345.	0.078	0.071	0.233	0.305	******	2.56	******	******	******	******	******	******
1615	360.	0.085	0.068	0.225	0.296	0.078	2.53	0.025	0.004	0.0012	0.0063	0.0005	0.0016

EC -164
ACETALDEHYDE
1976 MAY 17

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1015	0.	80.1	46.0	******	******	20.00
1030	15.	83.8	49.0	******	******	******
1045	30.	84.3	57.0	18.00	0.480	******
1100	45.	84.0	67.5	******	******	******
1115	60.	84.8	73.0	18.00	0.489	20.00
1130	75.	85.2	75.5	******	******	******
1145	90.	90.4	75.5	18.00	0.485	******
1200	105.	90.6	75.5	******	0.487	******
1215	120.	89.9	75.5	18.50	0.543	20.00
1230	135.	89.4	75.5	******	0.465	******
1245	150.	89.6	75.5	******	0.475	******
1300	165.	90.5	75.5	******	0.483	******
1315	180.	90.9	75.5	18.00	0.477	20.00
1330	195.	90.9	75.0	******	0.470	******
1345	210.	91.8	75.0	******	0.480	******
1400	225.	94.3	75.0	******	******	******
1415	240.	95.3	74.0	18.50	0.519	20.00
1430	255.	97.2	74.0	******	******	******
1445	270.	97.9	74.0	******	******	******
1500	285.	99.2	73.5	******	******	******
1515	300.	99.7	73.5	18.20	0.519	20.00
1530	315.	100.1	73.5	******	0.467	******
1545	330.	100.6	73.5	******	0.494	******
1600	345.	101.4	73.0	******	0.458	******
1615	360.	101.9	73.0	18.00	0.465	20.00

EC -165
2,3-DIMETHYLBUTANE
1976 MAY 1o

BEGIN IRRADIATION 1000, 0.25 INCH PYREX FILTER
ALKYL NITRATE DATA FROM C-600 CONSIDERED MORE RELIABLE THAN FROM PANALYZER
C6-N-O ATTRIBUTED TO UNKNOWN PEAK ON BOTH C-600 COLUMN AND PANALYZER.
ONLY C-600 DATA USED. CALIBRATION FACTOR ESTIMATED
CJ FACTOR 2.2/1.29
RADIOMETER CORRECTION -0.005 MW/CM2

T=0 AT 1000 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	301.7
SSPOWER	MW	AVERAGE	16.35
RADIUM	MW/CM2	AVERAGE	C.900
NO	PPM	INIT COND	0.088
NO2-CORR	PPM	INIT COND	0.011
2,3-DMB	PPM	INIT COND	1.885
ACETONE	PPM	INIT COND	C.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.436
430.	2.198
403.	1.971
380.	1.652
370.	1.429
360.	1.182
350.	1.000
340.	0.698
330.	0.461
320.	0.232
310.	0.090
300.	0.022
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.745 L/MIN

79 GC SAMPLES TAKEN

EC -165
2,3-DIMETHYLBUTANE
1976 MAY 18

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	2,3-DMB PPM	CO PPM	PAN PPM	HCHO PPM	ACETONE PPM	C3-N-2 PPM C-000	C3-N-2 PPM PANALYZR	C6-N-D PPM C-000
1000	0.	0.0	0.008	0.011	0.099	1.86	******	0.000	0.0	0.302	0.0003	0.0	0.0
1015	15.	0.010	0.007	0.031	0.098	1.83	2.08	******	******	******	******	******	******
1030	30.	0.024	0.047	0.050	0.058	1.85	2.10	0.000	******	******	0.0000	0.0000	0.0017
1045	45.	0.039	0.042	0.056	0.055	1.75	2.18	******	******	******	******	******	******
1100	60.	0.064	0.029	0.060	0.055	1.81	2.15	0.000	0.000	0.082	0.0013	0.0016	0.0027
1115	75.	0.078	0.025	0.067	0.092	1.76	******	******	******	******	******	******	******
1130	90.	0.105	0.021	0.069	0.090	1.73	******	0.001	******	0.102	0.0023	0.0023	0.0045
1145	105.	0.129	0.020	0.067	0.088	1.66	******	******	******	******	******	******	******
1200	120.	0.149	0.019	0.066	0.086	1.71	******	0.002	0.0	0.123	0.0031	0.0030	0.0064
1215	135.	0.173	0.017	0.069	0.086	1.64	******	******	******	******	******	******	******
1230	150.	0.195	0.016	0.066	0.083	1.65	******	0.002	******	0.160	0.0037	0.0036	0.0073
1245	165.	0.217	0.015	0.064	0.080	1.59	2.35	******	******	******	******	******	******
1300	180.	0.237	0.014	0.063	0.077	1.60	2.36	0.003	0.0	0.220	0.0044	0.0045	0.0087
1315	195.	0.259	0.013	0.060	0.073	1.57	2.35	******	******	******	******	******	******
1330	210.	0.278	0.013	0.058	0.071	1.54	2.34	0.004	******	******	******	0.0054	******
1345	225.	0.303	0.012	0.055	0.068	1.53	2.37	******	******	******	******	******	******
1400	240.	0.325	0.013	0.052	0.065	1.50	2.42	0.006	0.0	0.193	0.0059	0.0061	0.0111
1415	255.	0.344	0.014	0.049	0.063	1.48	2.49	******	******	******	******	******	******
1430	270.	0.364	0.011	0.051	0.062	1.49	2.42	0.007	******	0.170	0.0063	0.0066	0.0118
1445	285.	0.386	0.011	0.047	0.058	1.44	2.43	******	******	******	******	******	******
1500	300.	0.403	0.011	0.047	0.058	1.42	2.46	0.008	0.0	0.288	0.0066	0.0071	0.0123
1515	315.	0.418	0.012	0.043	0.055	1.38	2.49	******	******	******	******	******	******
1530	330.	0.432	0.010	0.041	0.052	1.38	2.45	0.010	******	0.221	0.0075	0.0071	0.0134
1545	345.	0.445	0.011	0.039	0.049	1.33	2.57	******	******	******	******	******	******
1600	360.	0.457	0.011	0.039	0.050	1.36	2.57	0.011	0.0	0.334	0.0079	0.0079	0.0142
1615	375.	0.462	0.011	0.036	0.047	1.30	2.54	******	******	******	******	******	******
1630	390.	0.471	0.010	0.035	0.045	1.30	2.59	0.013	******	******	******	0.0082	******
1645	405.	0.474	0.012	0.034	0.044	1.27	2.59	******	******	******	******	******	******
1700	420.	0.481	0.010	0.033	0.044	1.25	2.64	0.013	0.0	0.302	******	0.0086	0.0148
1715	435.	0.481	0.010	0.032	0.042	1.21	2.64	******	******	******	******	******	******
1730	450.	0.484	0.010	0.030	0.041	1.31	2.72	0.016	******	0.432	0.0088	0.0091	0.0152
1745	465.	0.484	0.010	0.031	0.041	1.19	2.70	******	******	******	******	******	******
1800	480.	0.486	0.010	0.031	0.040	1.18	2.71	0.015	0.0	0.471	0.0089	0.0092	0.0156
1815	495.	0.486	0.011	0.028	0.039	1.19	2.81	******	******	******	******	******	******
1830	510.	0.489	0.010	0.030	0.039	1.16	2.77	0.016	******	0.431	0.0093	0.0092	0.0162
1845	525.	0.489	0.010	0.030	0.040	1.17	2.82	******	******	******	******	******	******
1900	540.	0.489	0.010	0.030	0.040	1.12	2.85	0.016	0.0	0.434	0.0092	0.0092	0.0166
1915	555.	0.489	0.011	0.027	0.039	******	2.86	******	******	******	******	******	******
1930	570.	0.489	0.010	0.028	0.039	******	2.82	0.017	******	******	******	0.0094	******
1945	585.	0.486	0.011	0.027	0.038	******	2.87	******	******	******	******	******	******
2000	600.	0.486	0.011	0.028	0.038	******	2.90	******	******	******	******	******	******

EC -165
2,3-DIMETHYLBUTANE
1976 MAY 18

CLOCK TIME	ELAPSED TIMIN)	TS DEG F	SSPOWER Km	RADICM MW/CM2	HCHO VOL L
1000	0.	85.0	******	0.454	20.00
1015	15.	86.5	18.50	0.480	******
1030	30.	85.5	18.10	0.481	******
1045	45.	85.0	******	0.476	******
1100	60.	87.2	18.20	0.464	20.00
1115	75.	88.4	******	******	******
1130	90.	90.9	******	******	******
1145	105.	92.6	******	0.481	******
1200	120.	94.3	18.30	0.479	20.00
1215	135.	95.5	******	******	******
1230	150.	96.5	******	******	******
1245	165.	97.5	******	******	******
1300	180.	97.7	17.90	0.469	20.00
1315	195.	97.0	******	0.476	******
1330	210.	96.2	18.10	0.474	******
1345	225.	96.0	18.10	0.469	******
1400	240.	96.0	18.50	0.481	20.00
1415	255.	95.7	******	0.476	******
1430	270.	95.7	******	0.481	******
1445	285.	95.7	******	0.469	******
1500	300.	96.0	18.50	0.476	20.00
1515	315.	85.7	******	0.481	******
1530	330.	86.5	******	0.458	******
1545	345.	86.2	******	0.484	******
1600	360.	86.2	18.20	0.466	20.00
1615	375.	85.7	******	0.466	******
1630	390.	85.5	******	0.474	******
1645	405.	85.5	******	0.466	******
1700	420.	85.2	18.30	0.474	20.00
1715	435.	86.0	******	0.471	******
1730	450.	86.2	******	0.476	******
1745	465.	86.7	******	0.491	******
1800	480.	86.5	18.80	0.486	20.00
1815	495.	87.0	******	0.491	******
1830	510.	87.2	******	0.496	******
1845	525.	87.2	******	0.508	******
1900	540.	87.7	18.90	0.503	20.00
1915	555.	88.0	******	0.474	******
1930	570.	86.2	******	0.486	******
1945	585.	86.5	******	0.481	******
2000	600.	86.2	18.50	0.479	******

EC -166
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 MAY 24

BEGIN IRRADIATION 1030: 0.25 INCH PYREX FILTER
ALKYL NITRATE DATA FROM C-600 CONSIDERED MORE RELIABLE THAN FROM PANALYZER
C6-N-D ATTRIBUTED TO UNKNOWN PEAK ON BOTH C-600 COLUMN AND PANALYZER.
ONLY C-600 DATA USED. CALIBRATION FACTOR ESTIMATED
ACETALDEHYDE MONITORED WITH 3-PART COLUMN
CO FACTOR 2.2/1.34
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 1030 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.4
REL HUM	%	AVERAGE	65.84
SSPOWER	KW	AVERAGE	18.86
RADIOM	MW/CM2	AVERAGE	0.505
H2O	PPM	AVERAGE	3.765E 04
NO	PPM	INIT COND	0.088
NO2-CORR	PPM	INIT COND	0.012
N-C4	PPM	INIT COND	1.816
2,3-DMB	PPM	INIT COND	0.319
CO	PPM	INIT COND	2.149
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.004
MEK	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.459
430.	2.206
403.	2.005
380.	1.673
370.	1.435
360.	1.204
350.	1.000
340.	0.718
330.	0.476
320.	0.234
310.	0.093
300.	0.029
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.777 L/MIN

60 GC SAMPLES TAKEN

EC -166
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 MAY 24

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM	2,3-DMB PPM
1030	0.	0.0	0.088	0.012	0.100	1.82	0.319
1045	15.	0.012	0.058	0.039	0.097	******	******
1100	30.	0.032	0.041	0.054	0.095	1.53	0.282
1115	45.	0.056	0.026	0.064	0.090	******	******
1130	60.	0.088	0.023	0.064	0.087	1.76	0.302
1145	75.	0.112	0.020	0.064	0.084	******	******
1200	90.	0.134	0.018	0.062	0.080	1.71	0.308
1215	105.	0.159	0.017	0.058	0.076	******	******
1230	120.	0.186	0.016	0.054	0.070	1.69	0.289
1245	135.	0.208	0.015	0.052	0.068	******	******
1300	150.	0.230	0.013	0.051	0.065	1.66	0.282
1315	165.	0.254	0.013	0.048	0.062	******	******
1330	180.	0.278	0.013	0.045	0.058	1.63	0.269
1345	195.	0.298	0.012	0.041	0.053	******	******
1400	210.	0.322	0.012	0.035	0.047	1.61	0.264
1415	225.	0.344	0.011	0.032	0.043	******	******
1430	240.	0.364	0.011	0.028	0.039	1.51	0.245
1445	255.	0.383	0.011	0.025	0.035	******	******
1500	270.	0.401	0.010	0.022	0.032	1.53	0.250
1515	285.	0.415	0.010	0.020	0.030	******	******
1530	300.	0.425	0.009	0.019	0.028	1.51	0.247
1545	315.	0.435	0.010	0.015	0.025	******	******
1600	330.	0.442	0.009	0.012	0.022	1.48	0.234
1615	345.	0.447	0.009	0.011	0.021	******	******
1630	360.	0.452	0.009	0.010	0.019	1.46	0.227
1645	375.	0.454	0.009	0.009	0.017	******	******
1700	390.	0.457	0.009	0.009	0.017	1.44	0.222
1715	405.	0.459	0.009	0.009	0.017	******	******
1730	420.	0.459	0.008	0.007	0.015	1.42	0.219
1745	435.	0.459	0.009	0.007	0.016	******	******
1800	450.	0.459	0.008	0.007	0.015	1.40	0.207
1815	465.	0.462	0.009	0.007	0.015	******	******
1830	480.	0.462	0.008	0.007	0.015	1.38	0.210

EC -166
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 MAY 24

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	C3-N-2 PPM C-600	C3-N-2 PPM PANALYZR	C4-N-2 PPM C-600	C6-N-D PPM C-600
1030	0.	2.15	0.000	0.0	0.0014	******	0.004	0.0008	******	0.0	0.0	0.0
1045	15.	2.12	******	******	******	******	******	******	******	******	******	******
1100	30.	2.17	0.001	******	******	0.0003	0.020	0.0174	******	0.0003	0.0015	******
1115	45.	2.12	******	******	******	******	******	******	******	******	******	******
1130	60.	2.22	0.003	0.004	0.0029	0.0009	0.034	0.0232	0.0008	0.0007	0.0034	0.0010
1145	75.	2.20	******	******	******	******	******	******	******	******	******	******
1200	90.	2.18	0.006	******	******	0.0010	0.051	0.0308	0.0008	0.0010	0.0044	0.0013
1215	105.	2.24	******	******	******	******	******	******	******	******	******	******
1230	120.	2.25	0.011	0.010	0.0190	0.0019	0.058	0.0406	******	0.0014	0.0060	0.0017
1245	135.	2.28	******	******	******	******	******	******	******	******	******	******
1300	150.	2.26	0.012	******	******	0.0019	0.046	0.0383	0.0015	0.0016	0.0063	0.0022
1315	165.	2.30	******	******	******	******	******	******	******	******	******	******
1330	180.	2.31	0.016	0.010	0.0271	0.0024	0.058	0.0475	0.0016	0.0023	0.0070	0.0025
1345	195.	2.35	******	******	******	******	******	******	******	******	******	******
1400	210.	2.38	0.021	******	******	0.0029	0.063	0.0526	******	0.0024	0.0089	0.0028
1415	225.	2.40	******	******	******	******	******	******	******	******	******	******
1430	240.	2.40	0.025	0.002	0.0353	0.0032	0.081	0.0638	0.0020	0.0026	0.0108	0.0030
1445	255.	2.44	******	******	******	******	******	******	******	******	******	******
1500	270.	2.48	0.029	******	******	0.0032	0.082	0.0678	0.0021	0.0027	0.0101	0.0033
1515	285.	2.50	******	******	******	******	******	******	******	******	******	******
1530	300.	2.47	0.031	0.004	0.0360	0.0038	0.109	0.0757	******	0.0029	******	0.0035
1545	315.	2.48	******	******	******	******	******	******	******	******	******	******
1600	330.	2.51	0.035	******	******	0.0041	0.071	******	0.0023	0.0031	0.0112	0.0034
1615	345.	2.49	******	******	******	******	******	******	******	******	******	******
1630	360.	2.60	0.037	0.002	0.0391	0.0038	0.123	0.0867	0.0023	0.0034	0.0125	0.0034
1645	375.	2.63	******	******	******	******	******	******	******	******	******	******
1700	390.	2.65	0.038	******	******	0.0044	0.089	0.0785	0.0025	0.0032	0.0125	0.0037
1715	405.	2.59	******	******	******	******	******	******	******	******	******	******
1730	420.	2.61	0.039	0.002	0.0429	0.0046	0.128	0.0932	0.0024	0.0033	0.0132	0.0035
1745	435.	2.65	******	******	******	******	******	******	******	******	******	******
1800	450.	2.65	0.040	******	******	******	******	******	******	0.0031	******	******
1815	465.	2.73	******	******	******	******	******	******	******	******	******	******
1830	480.	2.68	0.039	0.002	0.0429	0.0044	0.114	0.0912	0.0024	0.0032	0.0139	0.0037

EC -166
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 MAY 24

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1030	0.	83.3	47.5	******	******	20.00
1045	15.	87.2	47.5	******	0.465	******
1100	30.	85.5	51.5	18.90	0.482	******
1115	45.	85.5	57.5	******	0.480	******
1130	60.	85.5	63.0	19.10	0.482	20.00
1145	75.	85.0	69.0	******	******	******
1200	90.	86.0	71.0	******	******	******
1215	105.	86.0	70.5	******	0.470	******
1230	120.	85.7	69.0	18.90	0.480	20.00
1245	135.	86.5	70.5	******	******	******
1300	150.	86.5	70.0	******	******	******
1315	165.	86.7	70.5	******	0.487	******
1330	180.	87.2	70.0	18.90	0.482	20.00
1345	195.	87.7	70.0	******	0.480	******
1400	210.	87.4	67.5	******	0.475	******
1415	225.	87.9	68.5	******	******	******
1430	240.	87.9	68.0	******	******	20.00
1445	255.	87.9	67.0	******	0.480	******
1500	270.	87.2	66.5	******	******	******
1515	285.	87.0	67.0	******	0.489	******
1530	300.	86.5	67.5	18.70	0.480	20.00
1545	315.	86.5	67.5	******	0.475	******
1600	330.	86.2	68.0	******	******	******
1615	345.	86.0	68.0	******	******	******
1630	360.	85.7	67.5	19.00	0.482	20.00
1645	375.	86.5	67.5	******	0.475	******
1700	390.	87.0	67.5	******	******	******
1715	405.	86.5	67.5	******	******	******
1730	420.	86.0	67.0	******	0.489	20.00
1745	435.	86.2	67.0	******	0.487	******
1800	450.	86.5	67.5	******	0.507	******
1815	465.	86.7	67.5	******	0.489	******
1830	480.	87.2	67.5	18.50	0.492	20.00

EC -168
N-BUTANE + FORMALDEHYDE
1976 MAY 28

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER
0755: 2 TORR HCHO IN 500 ML BULB FLUSHED INTO EC
CO FACTOR 2.2/1.3
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 930 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.2
REL HUM	%	AVERAGE	65.81
SSPOWER	KW	AVERAGE	19.70
RADIOM	MW/CM2	AVERAGE	0.486
H2O	PPM	AVERAGE	2.777E 04
NO	PPM	INIT COND	0.327
NO2-CORR	PPM	INIT COND	0.166
N-C4	PPM	INIT COND	1.961
HCHO	PPM	INIT COND	0.101
CO	PPM	INIT COND	2.067
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.461
430.	1.966
403.	1.980
380.	1.661
370.	1.439
360.	1.180
350.	1.000
340.	0.729
330.	0.467
320.	0.229
310.	0.082
300.	0.012
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.758 L/MIN

88 GC SAMPLES TAKEN

EC -168
N-BUTANE + FORMALDEHYDE
1976 MAY 28

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM	HCHO PPM
930	0.	0.0	0.327	0.166	0.493	1.961	0.101
945	15.	0.010	0.267	0.204	0.472	1.918	******
1000	30.	0.015	0.217	0.239	0.457	1.882	******
1015	45.	0.022	0.172	0.271	0.446	1.862	******
1030	60.	0.034	0.142	0.285	0.428	1.813	0.040
1045	75.	0.044	0.120	0.293	0.414	1.791	******
1100	90.	0.056	0.103	0.297	0.400	1.775	******
1115	105.	0.066	0.084	0.302	0.386	1.755	******
1130	120.	0.083	0.082	0.293	0.376	1.750	0.036
1145	135.	0.098	0.071	0.291	0.363	1.722	******
1200	150.	0.110	0.064	0.288	0.351	1.709	******
1215	165.	0.127	0.057	0.279	0.338	1.694	******
1230	180.	0.142	0.053	0.274	0.328	1.671	0.044
1245	195.	0.156	0.049	0.268	0.317	1.661	******
1300	210.	0.171	0.044	0.258	0.302	1.646	******
1315	225.	0.183	0.042	0.247	0.289	1.623	******
1330	240.	0.195	0.035	0.242	0.279	1.618	0.048
1345	255.	0.213	0.034	0.231	0.267	1.595	******
1400	270.	0.230	0.033	0.222	0.256	1.567	******
1415	285.	0.244	0.027	0.217	0.244	1.562	******
1430	300.	0.256	0.027	0.204	0.231	1.552	0.050
1445	315.	0.274	0.024	0.193	0.218	1.534	******
1500	330.	0.291	0.024	0.185	0.208	1.519	******
1515	345.	0.308	0.021	0.175	0.193	1.493	******
1530	360.	0.327	0.021	0.164	0.185	1.493	0.042
1545	375.	0.347	0.020	0.149	0.169	1.476	******
1600	390.	0.362	0.017	0.139	0.158	1.460	******
1615	405.	0.381	0.016	0.128	0.145	1.427	******
1630	420.	0.405	0.016	0.119	0.134	1.422	0.050
1645	435.	0.420	0.015	0.103	0.118	1.412	******
1700	450.	0.442	0.013	0.092	0.106	1.410	******
1715	465.	0.462	0.013	0.081	0.094	1.377	******
1730	480.	0.484	0.013	0.067	0.081	1.354	0.040
1745	495.	0.511	0.012	0.056	0.069	1.354	******
1800	510.	0.532	0.012	0.048	0.060	1.323	******
1815	525.	0.554	0.012	0.039	0.052	1.321	******
1830	540.	0.576	0.011	0.030	0.041	1.023	0.040
1845	555.	0.596	0.012	0.021	0.032	1.286	******
1900	570.	0.616	0.011	0.014	0.025	1.227	******
1915	585.	0.633	0.010	0.007	0.018	******	******
1930	600.	0.640	0.010	0.0	0.011	1.237	0.040
1945	615.	0.647	0.011	0.0	0.010	******	******
2000	630.	0.652	0.010	0.0	0.007	1.227	******
2015	645.	0.655	0.010	0.0	0.005	******	******
2030	660.	0.655	0.010	0.0	0.004	1.204	0.044
2045	675.	0.655	0.010	0.0	0.002	******	******
2100	690.	0.655	0.011	0.0	0.002	1.178	******

EC -168
N-BUTANE + FORMALDEHYDE
1976 MAY 28

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	C2-N PPM	C4-N-2 PPM C-600	C4-N-1 PPM C-600
930	0.	2.07	0.000	******	0.0001	0.0024	0.0002	0.0002	0.0	0.0	0.0	0.0
945	15.	2.07	******	******	******	******	******	******	******	******	******	******
1000	30.	2.14	0.003	0.029	0.0005	0.0029	0.0013	0.0258	0.0	0.0002	0.0037	0.0011
1015	45.	2.13	******	******	******	******	******	******	******	******	******	******
1030	60.	2.22	0.005	0.036	0.0009	0.0045	0.0021	0.0450	0.0	0.0003	0.0063	0.0010
1045	75.	2.27	******	******	******	******	******	******	******	******	******	******
1100	90.	2.20	0.007	0.042	0.0013	0.0056	0.0025	0.0576	0.0	0.0003	0.0083	0.0013
1115	105.	2.30	******	******	******	******	******	******	******	******	******	******
1130	120.	2.35	0.012	0.054	0.0016	0.0047	0.0029	0.0582	0.0002	0.0004	0.0103	0.0016
1145	135.	2.37	******	******	******	******	******	******	******	******	******	******
1200	150.	2.39	0.015	0.060	0.0020	0.0077	0.0033	0.0789	0.0003	0.0005	0.0117	0.0017
1215	165.	2.41	******	******	******	******	******	******	******	******	******	******
1230	180.	2.46	0.019	0.062	0.0022	0.0086	0.0034	0.0882	0.0003	0.0007	0.0132	0.0020
1245	195.	2.47	******	******	******	******	******	******	******	******	******	******
1300	210.	2.47	0.022	0.070	0.0026	0.0069	0.0035	0.0835	0.0004	0.0008	0.0149	0.0023
1315	225.	2.50	******	******	******	******	******	******	******	******	******	******
1330	240.	2.56	0.025	0.077	0.0029	0.0084	0.0038	0.0973	0.0005	0.0008	0.0153	0.0020
1345	255.	2.59	******	******	******	******	******	******	******	******	******	******
1400	270.	2.58	0.029	0.081	0.0034	0.0097	0.0042	0.1080	0.0006	0.0008	0.0151	0.0022
1415	285.	2.60	******	******	******	******	******	******	******	******	******	******
1430	300.	2.62	0.033	0.080	0.0037	0.0107	0.0043	0.1160	0.0006	0.0009	0.0179	0.0025
1445	315.	2.62	******	******	******	******	******	******	******	******	******	******
1500	330.	2.66	0.037	0.093	0.0043	0.0084	0.0044	0.1020	0.0006	0.0008	0.0168	0.0023
1515	345.	2.68	******	******	******	******	******	******	******	******	******	******
1530	360.	2.77	0.041	0.087	0.0043	0.0108	0.0046	0.1250	0.0006	0.0009	0.0193	0.0022
1545	375.	2.76	******	******	******	******	******	******	******	******	******	******
1600	390.	2.81	0.046	0.096	0.0047	0.0085	0.0049	0.1130	0.0010	0.0008	0.0202	0.0025
1615	405.	2.82	******	******	******	******	******	******	******	******	******	******
1630	420.	2.83	0.049	0.093	0.0048	0.0092	0.0048	0.1230	0.0010	0.0011	0.0216	0.0026
1645	435.	2.84	******	******	******	******	******	******	******	******	******	******
1700	450.	2.88	0.056	0.105	0.0059	0.0151	0.0052	0.1500	0.0011	0.0012	0.0229	0.0029
1715	465.	2.93	******	******	******	******	******	******	******	******	******	******
1730	480.	2.92	0.064	0.099	0.0060	0.0139	0.0053	0.1450	0.0009	0.0012	0.0246	0.0034
1745	495.	2.93	******	******	******	******	******	******	******	******	******	******
1800	510.	2.96	0.070	0.114	0.0070	0.0213	0.0055	0.1700	0.0008	0.0011	0.0252	0.0031
1815	525.	2.94	******	******	******	******	******	******	******	******	******	******
1830	540.	3.03	0.076	0.114	******	0.0249	0.0056	0.1710	0.0009	0.0011	0.0258	0.0030
1845	555.	3.09	******	******	******	******	******	******	******	******	******	******
1900	570.	3.08	0.083	******	******	******	******	******	0.0009	0.0011	******	******
1915	585.	3.11	******	******	******	******	******	******	******	******	******	******
1930	600.	3.09	0.092	0.114	0.0081	0.0385	0.0058	0.1930	0.0008	0.0011	0.0283	0.0029
1945	615.	3.13	******	******	******	******	******	******	******	******	******	******
2000	630.	3.21	0.091	******	******	******	******	******	0.0008	0.0011	******	******
2015	645.	3.17	******	******	******	******	******	******	******	******	******	******
2030	660.	3.21	0.092	0.089	0.0070	0.0259	0.0061	0.1770	0.0009	0.0012	0.0289	0.0035
2045	675.	3.25	******	******	******	******	******	******	******	******	******	******
2100	690.	3.21	0.092	0.113	0.0076	0.0368	0.0052	0.1810	0.0010	0.0011	0.0278	0.0032

EC -168
N-BUTANE + FORMALDEHYDE
1976 MAY 28

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	84.0	50.5	******	******	20.00
945	15.	85.7	52.5	19.50	0.477	******
1000	30.	84.8	57.5	19.50	0.475	******
1015	45.	85.2	65.5	******	0.480	******
1030	60.	86.0	67.5	19.50	0.499	20.00
1045	75.	86.0	68.5	******	0.480	******
1100	90.	86.2	68.5	******	0.485	******
1115	105.	86.2	68.5	******	0.499	******
1130	120.	86.2	69.0	19.40	0.480	20.00
1145	135.	86.5	68.5	******	0.487	******
1200	150.	86.2	69.0	******	0.487	******
1215	165.	86.5	69.0	******	0.489	******
1230	180.	86.5	68.5	19.80	0.489	20.00
1245	195.	86.5	69.0	******	0.480	******
1300	210.	86.2	68.5	******	******	******
1315	225.	86.2	68.5	******	******	******
1330	240.	86.0	68.5	19.40	0.485	20.00
1345	255.	86.0	68.5	******	0.485	******
1400	270.	85.7	68.0	******	0.477	******
1415	285.	86.0	68.5	******	******	******
1430	300.	86.0	67.5	19.40	0.494	20.00
1445	315.	86.2	67.5	******	0.482	******
1500	330.	86.0	67.5	******	******	******
1515	345.	86.2	67.5	******	******	******
1530	360.	86.2	67.0	19.60	0.504	20.00
1545	375.	86.5	67.0	******	0.494	******
1600	390.	85.7	66.5	******	0.477	******
1615	405.	85.7	66.5	******	0.472	******
1630	420.	86.0	66.5	19.60	0.480	20.00
1645	435.	85.5	66.5	******	******	******
1700	450.	86.0	66.0	******	0.492	******
1715	465.	86.2	66.5	******	******	******
1730	480.	86.2	66.0	20.20	0.494	20.00
1745	495.	86.2	66.0	******	0.499	******
1800	510.	86.5	66.0	******	******	******
1815	525.	87.2	66.0	******	******	******
1830	540.	87.0	65.5	20.20	0.511	20.00
1845	555.	87.0	65.5	******	******	******
1900	570.	87.0	65.5	******	******	******
1915	585.	87.2	65.5	******	******	******
1930	600.	87.2	65.5	20.20	0.502	20.00
1945	615.	86.5	65.5	******	0.480	******
2000	630.	87.0	65.0	******	0.494	******
2015	645.	86.5	65.5	******	******	******
2030	660.	86.7	65.5	19.80	0.472	20.00
2045	675.	86.2	65.5	******	0.487	******
2100	690.	86.5	65.0	******	0.487	******

EC -169
2,3-DIMETHYLBUTANE
1976 JUN 2

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER
ALKYL NITRATE DATA FROM C-600 CONSIDERED MORE RELIABLE THAN FROM PANALYZER
C6-N-O ATTRIBUTED TO UNKNOWN PEAK ON BOTH C-600 COLUMN AND PANALYZER.
ONLY C-600 DATA USED. CALIBRATION FACTOR ESTIMATED
HCHO DATA QUESTIONABLE, COLOR IN BLANK, NEW BLANK AT 1800
ACETALD MONITORED ON 3-PART COLUMN
CO FACTOR 2.2/1.28

T=0 AT 930 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	306.6
REL HUM	%	AVERAGE	65.14
SSPOWER	KW	AVERAGE	19.97
RADIOM	MW/CM2	AVERAGE	0.484
H2O	PPM	AVERAGE	4.095E 04
NO	PPM	INIT COND	0.127
NO2-CORR	PPM	INIT COND	0.004
2,3-DMB	PPM	INIT COND	0.740
CO	PPM	INIT COND	3.682
HCHO	PPM	INIT COND	0.020
ACETONE	PPM	INIT COND	0.003
MEK	PPM	INIT COND	0.000

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:	WAVELENGTH(NM)	REL. INTENSITY
	500.	2.000
	430.	2.313
	403.	2.092
	380.	1.695
	370.	1.449
	360.	1.180
	350.	1.000
	340.	0.716
	330.	0.440
	320.	0.203
	310.	0.075
	300.	0.010
	290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.714 L/MIN

69 GC SAMPLES TAKEN

EC -169
2,3-DIMETHYLBUTANE
1976 JUN 2

CLOCK TIME	ELAPSEC T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	2,3-DMB PPM
930	0.	0.0	0.127	0.064	0.191	0.740
945	15.	0.015	0.108	0.080	0.188	******
1000	30.	0.024	0.084	0.098	0.182	0.718
1015	45.	0.034	0.072	0.108	0.180	******
1030	60.	0.039	0.062	0.113	0.175	0.698
1045	75.	0.049	0.053	0.117	0.171	******
1100	90.	0.061	0.048	0.119	0.163	0.661
1115	105.	0.068	0.044	0.121	0.166	******
1130	120.	0.078	0.041	0.121	0.163	0.631
1145	135.	0.088	0.040	0.120	0.159	******
1200	150.	0.098	0.034	0.124	0.158	0.620
1215	165.	0.103	0.034	0.120	0.154	******
1230	180.	0.112	0.030	0.121	0.151	0.591
1245	195.	0.125	0.028	0.120	0.149	******
1300	210.	0.132	0.028	0.118	0.147	0.578
1315	225.	0.142	0.025	0.119	0.144	******
1330	240.	0.151	0.023	0.117	0.141	0.554
1345	255.	0.161	0.022	0.114	0.136	******
1400	270.	0.169	0.022	0.111	0.133	0.535
1415	285.	0.181	0.020	0.109	0.129	******
1430	300.	0.191	0.018	0.106	0.124	0.510
1445	315.	0.203	0.016	0.104	0.121	******
1500	330.	0.213	0.018	0.101	0.119	0.491
1515	345.	0.225	0.016	0.098	0.114	******
1530	360.	0.237	0.015	0.094	0.110	0.470
1545	375.	0.249	0.016	0.090	0.105	******
1600	390.	0.264	0.014	0.088	0.101	0.470
1615	405.	0.276	0.012	0.086	0.098	******
1630	420.	0.288	0.012	0.080	0.092	0.449
1645	435.	0.300	0.013	0.077	0.091	******
1700	450.	0.320	0.012	0.073	0.085	0.427
1715	465.	0.335	0.012	0.068	0.080	******
1730	480.	0.354	0.012	0.064	0.076	0.413
1745	495.	0.369	0.012	0.060	0.073	******
1800	510.	0.383	0.009	0.057	0.065	0.397
1815	525.	0.401	0.010	0.052	0.062	******
1830	540.	0.415	0.010	0.048	0.058	0.385
1845	555.	0.432	0.009	0.045	0.054	******
1900	570.	0.442	0.008	0.041	0.049	0.363
1915	585.	0.452	0.008	0.039	0.047	******
1930	600.	0.464	0.007	0.036	0.044	0.346
1945	615.	0.471	0.008	0.033	0.041	******
2000	630.	0.479	0.009	0.032	0.040	0.335
2015	645.	0.484	0.008	0.030	0.039	******
2030	660.	0.486	0.009	0.029	0.037	0.324
2045	675.	0.489	0.008	0.027	0.035	******
2100	690.	0.491	0.008	0.027	0.036	******
2115	705.	0.491	0.008	0.026	0.035	******
2130	720.	0.493	0.009	0.025	0.034	******

EC -169
2,3-DIMETHYLBUTANE
1976 JUN 2

CLOCK TIME	ELAPSED TIME(M)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	ACETONE PPM	MEK PPM	C3-N-2 PPM C-600	C3-N-2 PPM PANALYZR	C6-N-0 PPM C-600
930	0.	3.68	C.000	C.020	******	0.003	0.0005	0.0001	0.0	0.0
945	15.	3.64	******	******	******	******	******	******	******	******
1000	30.	3.67	0.000	******	******	******	0.0007	0.0010	0.0009	0.0016
1015	45.	3.71	******	******	******	******	******	******	******	******
1030	60.	3.69	C.001	0.030	******	0.004	0.0005	0.0015	0.0016	0.0028
1045	75.	3.78	******	******	******	******	******	******	******	******
1100	90.	3.68	0.002	******	******	0.079	0.0005	0.0026	0.0020	0.0034
1115	105.	3.73	******	******	******	******	******	******	******	******
1130	120.	3.78	0.003	0.020	******	0.080	0.0004	0.0022	0.0023	0.0043
1145	135.	******	******	******	******	******	******	******	******	******
1200	150.	******	0.002	******	******	0.109	0.0005	0.0027	0.0030	0.0051
1215	165.	******	******	******	******	******	******	******	******	******
1230	180.	******	0.003	0.020	0.0081	0.129	0.0006	0.0030	0.0033	0.0059
1245	195.	******	******	******	******	******	******	******	******	******
1300	210.	******	******	******	******	0.121	0.0005	0.0033	******	0.0060
1315	225.	******	******	******	******	******	******	******	******	******
1330	240.	******	0.004	C.020	******	0.127	******	0.0038	0.0037	0.0067
1345	255.	******	******	******	******	******	******	******	******	******
1400	270.	******	C.004	******	******	0.143	0.0006	0.0039	0.0041	0.0067
1415	285.	******	******	******	******	******	******	******	******	******
1430	300.	******	0.006	0.022	******	0.138	******	0.0042	0.0046	0.0076
1445	315.	******	******	******	******	******	******	******	******	******
1500	330.	******	0.006	******	******	0.150	0.0006	0.0044	0.0052	0.0084
1515	345.	******	******	******	******	******	******	******	******	******
1530	360.	******	C.008	C.022	0.0132	0.164	0.0006	0.0050	0.0058	0.0084
1545	375.	******	******	******	******	******	******	******	******	******
1600	390.	4.01	C.008	******	******	0.168	0.0006	0.0053	0.0056	0.0090
1615	405.	4.07	******	******	******	******	******	******	******	******
1630	420.	4.05	C.010	0.004	******	0.139	C.0006	0.0056	0.0061	0.0097
1645	435.	4.05	******	******	******	******	******	******	******	******
1700	450.	4.10	C.012	******	******	0.217	0.0007	0.0060	0.0066	0.0103
1715	465.	******	******	******	******	******	******	******	******	******
1730	480.	******	******	******	******	0.195	0.0006	0.0065	******	0.0107
1745	495.	******	******	******	******	******	******	******	******	******
1800	510.	******	0.016	******	******	0.193	******	0.0065	0.0073	0.0113
1815	525.	4.09	******	******	******	******	******	******	******	******
1830	540.	4.19	0.018	0.010	******	0.216	0.0006	0.0072	0.0078	0.0119
1845	555.	4.18	******	******	******	******	******	******	******	******
1900	570.	4.18	******	******	******	******	******	******	******	******
1915	585.	4.18	******	******	******	******	******	******	******	******
1930	600.	4.17	C.022	0.014	0.0184	0.240	0.0007	0.0077	0.0083	0.0129
1945	615.	4.21	******	******	******	******	******	******	******	******
2000	630.	4.25	******	******	******	******	******	******	******	******
2015	645.	4.25	******	******	******	******	******	******	******	******
2030	660.	4.28	C.024	0.020	******	0.345	******	0.0081	0.0088	0.0134
2045	675.	4.24	******	******	******	******	******	******	******	******
2100	690.	4.29	******	******	******	******	******	******	******	******
2115	705.	4.29	******	******	******	******	******	******	******	******
2130	720.	******	******	******	******	******	******	******	******	******

EC -169
2,3-DIMETHYLBUTANE
1976 JUN 2

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	85.2	47.5	******	******	20.00
945	15.	88.2	46.0	******	0.507	******
1000	30.	84.3	52.5	19.80	0.480	******
1015	45.	84.5	56.5	******	******	******
1030	60.	84.0	64.5	19.80	******	20.00
1045	75.	93.8	67.0	******	******	******
1100	90.	93.6	67.5	******	******	******
1115	105.	94.5	68.5	******	******	******
1130	120.	94.3	69.0	19.70	0.482	20.00
1145	135.	94.0	69.5	******	0.477	******
1200	150.	94.5	69.0	******	******	******
1215	165.	95.0	69.0	******	******	******
1230	180.	94.0	69.0	20.00	0.489	20.00
1245	195.	95.0	66.5	******	******	******
1300	210.	94.0	68.5	******	******	******
1315	225.	94.8	68.0	******	******	******
1330	240.	95.3	68.5	******	0.477	20.00
1345	255.	94.6	68.0	******	******	******
1400	270.	95.7	68.0	******	******	******
1415	285.	95.7	68.0	******	******	******
1430	300.	96.0	67.5	20.10	0.487	20.00
1445	315.	95.5	67.0	******	0.482	******
1500	330.	96.0	67.5	******	******	******
1515	345.	96.0	67.0	******	******	******
1530	360.	96.2	66.0	20.00	0.485	20.00
1545	375.	96.5	66.0	******	0.485	******
1600	390.	97.0	65.5	******	******	******
1615	405.	98.2	65.0	******	******	******
1630	420.	98.7	64.5	20.00	******	20.00
1645	435.	98.9	65.0	******	******	******
1700	450.	99.2	64.5	******	******	******
1715	465.	100.1	64.5	******	******	******
1730	480.	100.0	64.5	20.10	0.477	******
1745	495.	100.4	64.5	******	0.485	******
1800	510.	85.7	65.0	******	******	******
1815	525.	86.5	64.0	******	******	******
1830	540.	86.5	64.0	20.10	0.482	20.00
1845	555.	87.0	64.0	******	******	******
1900	570.	87.0	64.5	******	******	******
1915	585.	86.5	64.5	******	0.477	******
1930	600.	86.5	65.5	20.20	0.475	20.00
1945	615.	86.5	64.5	******	******	******
2000	630.	86.2	64.0	******	******	******
2015	645.	86.2	65.0	******	0.477	******
2030	660.	85.7	64.0	20.10	0.477	20.00
2045	675.	85.5	65.5	******	0.472	******
2100	690.	85.7	65.0	19.90	0.475	******
2115	705.	85.7	65.0	******	******	******
2130	720.	85.7	65.0	******	0.487	******

EC -171
2,3-DIMETHYLBUTANE
1976 JUN 9

BEGIN IRRADIATION 0900; 0.25 INCH PYREX FILTER
ACETALDEHYDE MONITORED ON 3-PART COLUMN
C6-N-6 ATTRIBUTED TO UNKNOWN PEAK ON BOTH C-600 COLUMN AND PANALYZER.
CALIBRATION FACTOR ESTIMATED
ALKYL NITRATE DATA FROM C-600 CONSIDERED MORE RELIABLE THAN FROM PANALYZER
SPEC DISTRIB DATA FROM STRIP CHART (25 NM/INCH)
CO FACTOR 2.2/1.26
RADIOMETER CORRECTION -0.004 MW/CM2

T=0 AT 900 PDT

	CALIB#
PAN	5
REL HUM	2
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	61.32
SSPOWER	KW	AVERAGE	19.85
RADIOM	MW/CM2	AVERAGE	0.479
H2O	PPM	AVERAGE	3.364E 04
NO	PPM	INIT COND	0.060
NO2-CORR	PPM	INIT COND	0.013
2,3-DMB	PPM	INIT COND	0.506
CO	PPM	INIT COND	2.192
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.003
C3-N-2	PPM	INIT COND	0.001
C3-N-2	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.614
490.	2.291
480.	2.067
380.	1.697
370.	1.458
360.	1.193
350.	1.000
340.	0.712
330.	0.463
320.	0.233
310.	0.087
300.	0.024
290.	0.0
280.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.759 L/MIN

75 GC SAMPLES TAKEN

EC -171
2,3-DIMETHYLBUTANE
1970 JUN 9

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	2,3-DMB PPM
900	0.	0.0	0.086	0.013	0.099	0.586
915	15.	0.012	0.060	0.034	0.095	******
930	30.	0.024	0.045	0.046	0.091	0.572
945	45.	0.042	0.035	0.051	0.088	******
1000	60.	0.056	0.029	0.053	0.083	0.554
1015	75.	0.071	0.027	0.053	0.080	******
1030	90.	0.085	0.023	0.055	0.078	0.516
1045	105.	0.100	0.022	0.053	0.076	******
1100	120.	0.112	0.021	0.050	0.072	0.508
1115	135.	0.127	0.020	0.048	0.068	******
1130	150.	0.139	0.019	0.048	0.066	0.490
1145	165.	0.151	0.018	0.046	0.064	******
1200	180.	0.166	0.017	0.044	0.061	0.484
1215	195.	0.178	0.016	0.043	0.059	******
1230	210.	0.195	0.015	0.040	0.056	0.439
1245	225.	0.208	0.014	0.038	0.052	******
1300	240.	0.220	0.014	0.036	0.050	0.401
1315	255.	0.232	0.013	0.035	0.048	******
1330	270.	0.249	0.013	0.032	0.045	0.389
1345	285.	0.264	0.012	0.029	0.041	******
1400	300.	0.276	0.012	0.025	0.037	0.378
1415	315.	0.288	0.011	0.023	0.034	******
1430	330.	0.303	0.011	0.020	0.032	0.355
1445	345.	0.318	0.011	0.019	0.030	******
1500	360.	0.330	0.011	0.016	0.027	0.364
1515	375.	0.342	0.011	0.014	0.025	******
1530	390.	0.349	0.010	0.012	0.022	0.342
1545	405.	0.357	0.010	0.010	0.020	******
1600	420.	0.369	0.010	0.009	0.019	0.331
1615	435.	0.374	0.010	0.006	0.016	******
1630	450.	0.379	0.010	0.005	0.015	0.308
1645	465.	0.381	0.010	0.003	0.013	******
1700	480.	0.386	0.010	0.002	0.012	0.291
1715	495.	0.388	0.010	0.002	0.012	******
1730	510.	0.393	0.009	0.001	0.012	0.294
1745	525.	0.393	0.009	0.002	0.011	******
1800	540.	0.396	0.009	0.002	0.011	0.271
1815	555.	0.396	0.009	0.001	0.010	******
1830	570.	0.398	0.011	-0.001	0.011	0.259
1845	585.	0.401	0.009	0.001	0.010	******
1900	600.	0.401	0.009	0.002	0.011	0.245
1915	615.	0.401	0.009	0.001	0.010	******
1930	630.	0.403	0.010	0.003	0.012	0.243

EC -171
2,3-DIMETHYLBUTANE
1976 JUN 9

CLOCK TIME	ELAPSED TIME(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	C3-N-2 PPM C-600	C3-N-2 PPM PANALYZR	C6-N-D PPM C-600
900	0.	2.19	******	0.0	0.0024	0.0002	0.003	0.0006	0.0002	0.0
915	15.	2.20	******	******	******	******	******	******	******	******
930	30.	2.15	0.001	******	******	******	******	0.0007	0.0007	0.0041
945	45.	2.23	******	******	******	******	******	******	******	******
1000	60.	2.16	0.001	0.004	******	0.0005	0.049	0.0017	0.0012	0.0077
1015	75.	2.22	******	******	******	******	******	******	******	******
1030	90.	2.26	0.002	******	******	0.0006	0.061	******	******	******
1045	105.	2.23	******	******	******	******	******	******	0.0017	0.0099
1100	120.	2.20	0.002	0.010	******	0.0008	0.091	0.0025	0.0022	0.0120
1115	135.	2.28	******	******	******	******	******	******	******	******
1130	150.	2.25	******	******	******	0.0006	0.096	******	******	0.0137
1145	165.	2.27	******	******	******	******	******	******	******	******
1200	180.	2.32	0.004	0.018	0.0103	0.0006	0.123	0.0034	0.0032	0.0150
1215	195.	2.34	******	******	******	******	******	******	******	******
1230	210.	2.35	0.005	******	******	0.0011	******	******	0.0035	0.0170
1245	225.	2.34	******	******	******	******	******	******	******	******
1300	240.	2.41	0.006	0.018	******	0.0014	0.162	******	0.0040	0.0176
1315	255.	2.39	******	******	******	******	******	******	******	******
1330	270.	2.42	0.007	******	******	******	******	******	******	******
1345	285.	2.43	******	******	******	******	0.114	******	0.0042	0.0168
1400	300.	2.39	0.008	0.020	******	******	******	******	******	******
1415	315.	2.46	******	******	******	******	0.189	0.0049	0.0045	0.0217
1430	330.	2.50	0.010	******	******	0.0018	******	******	******	******
1445	345.	2.51	******	******	******	******	0.157	0.0053	0.0047	0.0226
1500	360.	2.56	0.012	0.020	0.0058	0.0035	******	******	******	******
1515	375.	2.51	******	******	******	******	0.215	0.0056	0.0052	0.0230
1530	390.	2.53	0.013	******	******	******	******	******	******	******
1545	405.	2.60	******	******	******	0.0030	0.200	0.0056	0.0057	0.0258
1600	420.	2.62	0.014	0.020	******	******	******	******	******	******
1615	435.	2.63	******	******	******	0.0027	0.214	0.0060	0.0060	0.0258
1630	450.	2.66	0.016	******	******	******	******	******	******	******
1645	465.	2.61	******	******	******	0.0027	0.172	0.0063	0.0065	0.0260
1700	480.	2.70	0.018	0.020	******	******	******	******	******	******
1715	495.	2.67	******	******	******	0.0030	0.262	0.0066	0.0065	0.0272
1730	510.	2.70	0.018	******	******	******	******	******	******	******
1745	525.	2.71	******	******	******	0.0030	0.240	0.0068	0.0065	0.0260
1800	540.	2.75	0.019	0.020	******	******	******	******	******	******
1815	555.	2.80	******	******	0.0196	0.0030	0.296	0.0068	0.0065	0.0263
1830	570.	2.77	0.020	******	******	******	******	******	******	******
1845	585.	2.77	******	******	******	******	0.279	0.0069	0.0067	******
1900	600.	2.85	0.020	0.020	******	******	******	******	******	******
1915	615.	2.81	******	******	******	******	0.362	******	0.0070	0.0271
1930	630.	2.90	0.020	******	0.0294	******	******	******	******	******
							0.321	0.0072	0.0072	0.0257

EC -171
2,3-DIMETHYLBUTANE
1976 JUN 9

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
900	0.	85.0	47.5	19.80	0.511	20.00
915	15.	86.0	46.5	******	0.472	******
930	30.	85.2	52.5	******	0.482	******
945	45.	85.5	59.0	******	0.480	******
1000	60.	85.7	61.0	19.80	0.480	20.00
1015	75.	85.7	62.0	******	******	******
1030	90.	85.5	62.5	******	******	******
1045	105.	85.5	63.0	******	******	******
1100	120.	85.5	63.0	19.80	0.477	20.00
1115	135.	85.5	63.0	******	******	******
1130	150.	85.5	63.0	******	******	******
1145	165.	85.5	63.0	******	******	******
1200	180.	85.7	63.0	19.80	0.472	20.00
1215	195.	85.7	63.0	******	******	******
1230	210.	85.7	63.5	******	******	******
1245	225.	85.2	63.0	******	0.475	******
1300	240.	85.7	62.5	19.80	0.477	20.00
1315	255.	85.5	63.0	******	0.477	******
1330	270.	85.5	62.0	******	0.477	******
1345	285.	85.7	62.0	******	0.482	******
1400	300.	86.0	62.5	19.70	0.485	20.00
1415	315.	85.5	62.5	******	0.470	******
1430	330.	86.2	62.5	******	******	******
1445	345.	85.5	62.0	******	******	******
1500	360.	85.7	62.0	19.70	0.485	20.00
1515	375.	85.7	62.0	******	0.472	******
1530	390.	85.2	62.0	******	0.467	******
1545	405.	85.2	62.0	******	0.477	******
1600	420.	86.2	62.0	******	0.465	20.00
1615	435.	86.2	62.0	******	0.475	******
1630	450.	86.2	62.0	******	0.475	******
1645	465.	86.2	61.5	******	0.485	******
1700	480.	85.5	61.5	20.00	0.480	20.00
1715	495.	86.2	62.0	******	0.482	******
1730	510.	85.5	62.0	******	******	******
1745	525.	86.0	61.5	******	******	******
1800	540.	86.2	61.5	20.00	0.499	20.00
1815	555.	86.5	61.5	******	0.492	******
1830	570.	86.5	61.0	******	0.492	******
1845	585.	87.2	61.3	******	0.469	******
1900	600.	87.0	61.5	20.00	0.485	20.00
1915	615.	87.0	61.0	******	0.489	******
1930	630.	87.2	61.5	20.10	0.480	******

EC -172
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 JUN 10

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER
ACETALDEHYDE MONITORED ON 3-PART COLUMN
ALKYL NITRATE DATA FROM C-600 CONSIDERED MORE RELIABLE THAN FROM PANALYZER
C6-N-D ATTRIBUTED TO UNKNOWN PEAK ON BOTH C-600 COLUMN AND PANALYZER.
CALIBRATION FACTOR ESTIMATED
CO FACTOR 2.2/1.25
RADIOMETER CORRECTION -0.002 MW/CM2

T=0 AT 915 PDT

	CALIB#
PAN	9
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	51.25
SSPOWER	KW	AVERAGE	20.03
RADIOM	MW/CM2	AVERAGE	0.466
H2O	PPM	AVERAGE	1.303E 05
NO	PPM	INIT COND	0.079
NO2-CORR	PPM	INIT COND	0.017
N-C4	PPM	INIT COND	0.339
2,3-DMB	PPM	INIT COND	0.237
CO	PPM	INIT COND	2.317
ACETALD	PPM	INIT COND	0.004
ACETONE	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.629
430.	2.328
403.	2.089
380.	1.704
370.	1.435
360.	1.183
350.	1.000
340.	0.710
330.	0.455
320.	0.228
310.	0.083
300.	0.017
290.	0.002
280.	0.0

K1=0.34 MIN-1

SAMPLING RATE = 1.703 L/MIN

82 GC SAMPLES TAKEN

EC -172
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 JUN 10

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM	2,3-DMB PPM
915	0.	0.0	C.079	C.017	0.096	0.339	0.237
930	15.	0.012	0.064	0.030	0.094	******	******
945	30.	0.022	0.050	0.041	0.091	0.326	0.221
1000	45.	0.032	C.040	0.049	0.089	******	******
1015	60.	0.042	0.034	C.052	0.086	0.309	0.205
1030	75.	0.054	0.032	0.052	0.084	******	******
1045	90.	0.064	C.028	0.053	0.082	0.307	0.197
1100	105.	0.076	C.027	0.053	G.C80	******	******
1115	120.	0.085	0.024	0.053	0.076	0.297	0.187
1130	135.	0.095	0.022	0.054	0.076	******	******
1145	150.	0.103	C.021	0.053	0.074	0.286	0.178
1200	165.	0.117	C.020	0.051	0.071	******	******
1215	180.	0.125	C.019	0.050	0.069	0.274	0.166
1230	195.	0.137	C.018	0.050	0.068	******	******
1245	210.	0.147	C.016	0.051	0.067	0.265	0.162
1300	225.	0.159	C.016	0.048	0.064	******	******
1315	240.	0.169	0.016	0.044	0.059	0.263	0.152
1330	255.	0.181	C.014	0.043	0.057	******	******
1345	270.	0.188	0.013	0.042	0.056	0.259	0.146
1400	285.	0.203	C.013	0.041	0.053	******	******
1415	300.	0.210	0.013	0.038	0.050	0.247	0.141
1430	315.	0.225	C.012	0.036	C.047	******	******
1445	330.	0.237	0.012	0.033	0.045	0.248	0.134
1500	345.	0.247	C.011	0.033	0.043	******	******
1515	360.	0.259	C.011	C.030	0.041	0.236	0.127
1530	375.	0.269	C.011	0.028	0.039	******	******
1545	390.	0.278	C.011	0.024	0.034	0.237	0.120
1600	405.	0.288	C.010	0.023	0.033	******	******
1615	420.	0.298	C.012	0.018	0.030	0.223	0.117
1630	435.	0.308	C.010	0.019	0.028	******	******
1645	450.	0.316	0.009	0.017	0.027	0.222	0.109
1700	465.	0.327	0.009	0.017	0.026	******	******
1715	480.	0.335	C.009	0.015	0.025	0.217	0.103
1730	495.	0.337	C.009	0.014	0.023	******	******
1745	510.	0.342	C.009	0.013	0.022	0.215	0.099
1800	525.	0.347	C.009	0.013	0.022	******	******
1815	540.	0.352	0.009	0.013	0.021	0.196	0.092
1830	555.	0.352	0.009	0.011	0.020	******	******
1845	570.	0.357	C.010	0.010	0.019	0.204	0.089
1900	585.	0.359	0.009	0.011	0.019	******	******
1915	600.	0.362	C.009	0.012	0.020	0.200	0.093
1930	615.	0.362	C.009	0.012	0.020	******	******
1945	630.	0.366	C.008	0.012	0.021	0.200	C.082
2000	645.	0.366	C.009	0.012	0.020	******	******
2015	660.	0.366	0.008	0.011	0.019	0.192	0.080
2030	675.	0.366	C.008	0.012	0.020	******	******
2045	690.	0.369	0.009	0.013	0.022	0.194	0.076

EC -172
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 JUN 10

CLOCK TIME	ELAPSED TIMIN	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	C3-N-2 PPM C-000	C3-N-2 PPM PANALYZR	C4-N-2 PPM C-000	C4-N-1 PPM C-000	C6-N-D PPM C-000
915	0.	2.32	C.000	0.0	0.0036	0.0002	0.003	0.0000	0.0003	0.0	0.0	0.0	0.0
930	15.	2.36	******	******	******	******	******	******	******	******	******	******	******
945	30.	2.33	C.001	******	******	0.0003	0.016	0.0036	0.0007	0.0002	0.0002	0.0004	0.0001
1000	45.	2.33	******	******	******	******	******	******	******	******	******	******	******
1015	60.	2.30	C.001	0.010	******	0.0005	0.028	0.0063	0.0007	0.0004	0.0007	******	0.0001
1030	75.	2.33	******	******	******	******	******	******	******	******	******	******	******
1045	90.	2.33	0.003	******	******	0.0005	0.036	0.0085	0.0010	0.0007	0.0010	0.0007	0.0002
1100	105.	2.38	******	******	******	******	******	******	******	******	******	******	******
1115	120.	2.37	0.003	0.004	******	0.0006	0.031	0.0086	0.0011	0.0009	0.0013	0.0006	0.0002
1130	135.	2.36	******	******	******	******	******	******	******	******	******	******	******
1145	150.	2.44	0.004	******	******	0.0009	0.046	0.0115	0.0013	0.0010	0.0017	0.0007	0.0003
1200	165.	2.48	******	******	******	******	******	******	******	******	******	******	******
1215	180.	2.45	C.006	0.010	0.0146	0.0012	0.052	0.0133	0.0016	0.0011	0.0017	0.0006	0.0003
1230	195.	2.46	******	******	******	******	******	******	******	******	******	******	******
1245	210.	2.51	0.005	******	******	0.0014	0.060	0.0150	0.0018	0.0012	0.0022	0.0005	0.0003
1300	225.	2.44	******	******	******	******	******	******	******	******	******	******	******
1315	240.	2.54	C.003	0.010	******	0.0016	0.059	0.0159	0.0020	0.0016	0.0026	0.0	0.0003
1330	255.	2.53	******	******	******	******	******	******	******	******	******	******	******
1345	270.	2.57	C.010	******	******	0.0016	0.054	0.0157	0.0019	0.0016	0.0025	0.0006	0.0003
1400	285.	2.55	******	******	******	******	******	******	******	******	******	******	******
1415	300.	2.61	C.011	0.010	******	0.0019	0.073	0.0198	0.0021	0.0017	0.0031	0.0003	0.0004
1430	315.	2.59	******	******	******	******	******	******	******	******	******	******	******
1445	330.	2.55	0.013	******	******	0.0020	0.070	0.0197	0.0023	0.0019	0.0030	0.0005	0.0004
1500	345.	2.54	******	******	******	******	******	******	******	******	******	******	******
1515	360.	2.64	0.016	0.010	0.0233	0.0025	0.116	0.0259	0.0024	0.0022	0.0023	0.0003	0.0004
1530	375.	2.62	******	******	******	******	******	******	******	******	******	******	******
1545	390.	2.67	0.019	******	******	0.0023	0.111	0.0256	0.0025	0.0022	0.0032	0.0002	0.0004
1600	405.	2.64	******	******	******	******	******	******	******	******	******	******	******
1615	420.	2.62	C.021	0.010	******	0.0024	0.100	0.0257	0.0025	0.0024	0.0031	0.0003	0.0004
1630	435.	2.67	******	******	******	******	******	******	******	******	******	******	******
1645	450.	2.68	0.024	******	******	0.0032	0.132	0.0301	0.0027	0.0027	0.0028	0.0004	0.0005
1700	465.	2.68	******	******	******	******	******	******	******	******	******	******	******
1715	480.	2.75	C.025	0.010	******	0.0032	0.114	0.0267	0.0029	0.0028	0.0029	0.0004	0.0005
1730	495.	2.78	******	******	******	******	******	******	******	******	******	******	******
1745	510.	2.77	C.026	******	******	0.0032	0.132	0.0325	0.0029	0.0027	0.0032	0.0004	0.0005
1800	525.	2.77	******	******	******	******	******	******	******	******	******	******	******
1815	540.	2.79	C.028	0.006	0.0186	0.0030	0.150	0.0346	0.0030	0.0027	0.0032	0.0004	0.0005
1830	555.	2.82	******	******	******	******	******	******	******	******	******	******	******
1845	570.	2.82	C.029	******	******	0.0030	0.150	0.0334	0.0029	0.0029	0.0048	0.0003	0.0005
1900	585.	2.82	******	******	******	******	******	******	******	******	******	******	******
1915	600.	2.87	0.029	******	******	0.0033	0.138	0.0343	0.0032	0.0027	0.0032	0.0004	0.0005
1930	615.	2.85	******	******	******	******	******	******	******	******	******	******	******
1945	630.	2.93	0.029	******	******	0.0033	0.130	0.0333	0.0031	0.0027	0.0036	0.0001	0.0005
2000	645.	2.91	******	******	******	******	******	******	******	******	******	******	******
2015	660.	3.01	C.028	******	******	0.0030	0.107	0.0327	0.0031	0.0028	0.0050	0.0005	0.0004
2030	675.	3.00	******	******	******	******	******	******	******	******	******	******	******
2045	690.	2.95	C.027	******	0.0215	0.0032	0.128	0.0349	0.0030	0.0030	0.0050	0.0005	0.0005

EC -172
N-BUTANE + 2,3-DIMETHYLBUTANE
1976 JUN 10

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM Mw/CM2	HCHO VOL L
915	0.	84.5	46.5	******	******	20.00
930	15.	87.9	46.5	******	0.491	******
945	30.	86.5	50.5	******	0.484	******
1000	45.	87.0	52.5	19.70	0.479	******
1015	60.	87.0	55.0	20.00	0.487	20.00
1030	75.	87.0	58.5	******	******	******
1045	90.	86.5	61.0	******	******	******
1100	105.	86.5	61.5	******	******	******
1115	120.	86.2	62.0	20.00	0.491	20.00
1130	135.	86.5	62.5	******	0.484	******
1145	150.	85.0	63.0	******	******	******
1200	165.	86.0	62.5	******	******	******
1215	180.	85.7	62.0	20.10	0.487	20.00
1230	195.	85.7	62.0	******	******	******
1245	210.	86.0	62.0	******	******	******
1300	225.	86.0	62.5	******	0.487	******
1315	240.	86.0	62.0	19.90	0.489	20.00
1330	255.	85.5	62.0	******	******	******
1345	270.	85.7	61.5	******	******	******
1400	285.	85.5	61.5	******	******	******
1415	300.	85.5	61.5	20.00	0.479	20.00
1430	315.	86.0	61.5	******	0.479	******
1445	330.	85.7	61.5	******	******	******
1500	345.	86.2	61.5	******	******	******
1515	360.	84.8	61.0	20.00	0.467	20.00
1530	375.	85.0	61.5	******	0.477	******
1545	390.	85.0	61.5	******	******	******
1600	405.	85.2	61.5	******	0.472	******
1615	420.	85.5	61.5	20.00	0.504	20.00
1630	435.	85.2	61.5	******	******	******
1645	450.	86.0	61.0	******	******	******
1700	465.	86.2	61.0	******	******	******
1715	480.	86.5	******	20.40	0.501	20.00
1730	495.	86.5	******	******	0.496	******
1745	510.	86.5	******	******	0.496	******
1800	525.	86.7	******	******	******	******
1815	540.	86.5	******	20.20	0.479	20.00
1830	555.	86.5	******	******	******	******
1845	570.	86.2	******	******	******	******
1900	585.	86.2	******	******	******	******
1915	600.	86.2	******	20.10	0.504	******
1930	615.	86.2	******	******	0.499	******
1945	630.	86.2	******	******	0.494	******
2000	645.	86.2	******	******	0.489	******
2015	660.	86.0	******	20.00	0.484	******
2030	675.	85.7	******	******	0.491	******
2045	690.	86.2	******	20.00	0.491	******

EC -177
PROPENE
1976 JUL 9

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER
GRADY 1290 USED; CALIB JUL 16, 1976; VOLTAGE EXCEEDED CAPACITY OF DACS AT 1015;
VOLTAGE DIVIDER ADDED 1638.
CO FACTOR 2.2/1.21
RADIOMETER CORRECTION -0.002 MW/CM2

T=0 AT 945 PDT

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	307.0
REL HUM	%	AVERAGE	63.40
SSPOWER	KW	AVERAGE	13.71
RADION	MW/CM2	AVERAGE	0.357
H2O	PPM	AVERAGE	3.373E 04
NO	PPM	INIT COND	0.364
NO2-CORR	PPM	INIT COND	0.099
PROPENE	PPM	INIT COND	0.493
PAN	PPM	INIT COND	0.001
HCHO	PPM	INIT COND	0.010
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.072
430.	1.731
403.	1.597
380.	1.342
370.	1.209
360.	1.086
350.	1.000
340.	0.837
330.	0.637
320.	0.377
310.	0.166
300.	0.030
290.	0.001
280.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.709 L/MIN

55 GC SAMPLES TAKEN

EC -177
PROPENE
1976 JUL 9

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
945	0.	0.0	0.364	0.099	0.463	0.493
1000	15.	0.0	0.281	0.168	0.452	0.434
1015	30.	0.0	0.215	0.229	0.444	0.356
1030	45.	0.007	0.161	0.269	0.430	0.353
1045	60.	0.022	0.115	0.297	0.412	0.316
1100	75.	0.044	0.083	0.310	0.393	0.288
1115	90.	0.071	0.061	0.314	0.376	0.258
1130	105.	0.105	0.048	0.310	0.358	0.226
1145	120.	0.134	0.035	0.300	0.334	0.201
1200	135.	0.171	0.027	0.286	0.313	0.173
1215	150.	0.208	0.027	0.257	0.283	0.147
1230	165.	0.239	0.022	0.238	0.261	0.131
1245	180.	0.271	0.021	0.218	0.239	0.106
1300	195.	0.300	0.018	0.195	0.213	0.093
1315	210.	0.332	0.017	0.170	0.188	0.072
1330	225.	0.362	0.016	0.146	0.163	0.059
1345	240.	******	0.015	0.123	0.137	0.050
1400	255.	0.408	0.015	0.100	0.115	0.043
1415	270.	0.430	0.015	0.082	0.094	0.032
1430	285.	0.449	0.012	0.061	0.074	0.023
1445	300.	0.471	0.012	0.043	0.056	0.016
1500	315.	0.489	0.012	0.027	0.039	0.013
1515	330.	0.503	0.013	0.012	0.025	0.009
1530	345.	0.518	0.012	0.007	0.019	0.009
1545	360.	0.523	0.011	0.003	0.013	0.005
1600	375.	0.530	0.011	-0.002	0.009	******
1615	390.	0.532	0.012	-0.010	0.003	******
1630	405.	0.535	0.011	-0.006	0.005	******
1645	420.	0.537	0.011	-0.010	0.003	******
1700	435.	0.540	0.011	-0.008	0.004	******
1715	450.	0.537	0.012	-0.007	0.004	******

EC -177
PROPENE
1970 JUL 9

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETLNE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM
945	0.	******	0.001	0.010	0.001	0.0001	0.0011	0.0001	0.0001	0.0	0.0
1000	15.	3.15	******	******	******	******	******	******	******	******	******
1015	30.	3.15	0.002	******	0.065	0.0006	0.0026	0.0002	0.0002	******	0.0
1030	45.	3.22	******	******	******	******	******	******	******	******	******
1045	60.	3.18	0.008	******	0.119	0.0012	0.0033	0.0003	0.0001	******	0.0
1100	75.	3.24	******	******	******	******	******	******	******	******	******
1115	90.	3.29	0.019	******	0.145	0.0020	0.0041	0.0005	0.0002	0.0004	0.0002
1130	105.	3.32	******	******	******	******	******	******	******	******	******
1145	120.	3.30	0.032	0.064	0.161	0.0023	0.0048	0.0007	0.0002	0.0007	0.0005
1200	135.	3.34	******	******	******	******	******	******	******	******	******
1215	150.	3.40	0.050	******	0.164	0.0031	0.0066	0.0009	0.0002	0.0010	0.0008
1230	165.	3.42	******	******	******	******	******	******	******	******	******
1245	180.	3.42	0.061	******	0.172	0.0031	0.0067	0.0011	0.0002	0.0014	0.0010
1300	195.	3.47	******	0.091	******	******	******	******	******	******	******
1315	210.	3.46	0.081	******	0.186	0.0039	0.0080	0.0015	0.0003	0.0015	0.0010
1330	225.	3.53	******	******	******	******	******	******	******	******	******
1345	240.	3.56	0.102	0.040	0.168	0.0039	0.0079	0.0016	0.0004	0.0014	0.0011
1400	255.	3.59	******	******	******	******	******	******	******	******	******
1415	270.	3.60	0.117	******	0.157	0.0042	0.0086	0.0018	0.0005	0.0016	0.0011
1430	285.	3.63	******	******	******	******	******	******	******	******	******
1445	300.	3.64	0.138	0.050	0.139	0.0040	0.0089	0.0019	0.0005	0.0017	0.0012
1500	315.	3.72	******	******	******	******	******	******	******	******	******
1515	330.	3.73	0.156	******	0.126	0.0044	0.0148	0.0020	0.0006	0.0019	0.0011
1530	345.	3.71	******	******	******	******	******	******	******	******	******
1545	360.	3.77	0.158	0.040	0.099	0.0036	0.0081	0.0019	0.0004	0.0012	******
1600	375.	3.77	******	******	******	******	******	******	******	******	******
1615	390.	3.81	0.165	******	******	******	******	******	******	******	******
1630	405.	3.84	******	******	******	******	******	******	******	******	0.0012
1645	420.	3.86	0.182	******	******	******	******	******	******	******	******
1700	435.	3.85	******	******	******	******	******	******	******	******	******
1715	450.	3.66	0.158	******	******	******	******	******	******	******	0.0011

EC -177
PROPENE
1970 JUL 9

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADICN MW/CM2	HCHO VOL L
945	0.	75.2	54.0	14.40	******	20.00
1000	15.	84.5	56.5	13.60	0.369	******
1015	30.	83.0	******	13.50	0.362	******
1030	45.	83.0	******	******	0.350	******
1045	60.	83.5	******	13.40	0.350	20.00
1100	75.	76.7	******	******	0.350	******
1115	90.	80.8	******	******	******	******
1130	105.	86.5	******	******	0.355	******
1145	120.	89.6	******	13.50	0.352	20.00
1200	135.	91.8	******	******	0.347	******
1215	150.	93.1	******	******	******	******
1230	165.	94.3	******	******	******	******
1245	180.	95.5	******	13.40	******	******
1300	195.	96.0	******	******	******	20.00
1315	210.	96.5	******	******	******	******
1330	225.	97.2	******	******	******	******
1345	240.	97.5	******	******	******	20.00
1400	255.	96.5	******	******	******	******
1415	270.	96.2	******	******	0.350	******
1430	285.	98.4	******	******	0.352	******
1445	300.	99.2	******	13.50	0.342	20.00
1500	315.	99.2	******	******	0.345	******
1515	330.	99.2	******	******	0.342	******
1530	345.	99.4	******	******	0.372	******
1545	360.	98.9	******	14.10	0.364	20.00
1600	375.	99.2	******	******	0.369	******
1615	390.	99.2	******	******	0.372	******
1630	405.	99.2	******	******	0.364	******
1645	420.	99.7	68.5	14.00	0.360	******
1700	435.	99.4	69.0	******	0.364	******
1715	450.	99.2	69.0	******	0.374	******

EC -178
N-BUTANE
1976 JUL 13

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER
C4-N-2 DATA FROM C-600 COLUMN CONSIDERED MORE RELIABLE THAN FROM PANALYZER
BRADY 1296 USED; CALIB JUL 16, 1976
CO FACTOR 2.2/1.21
RADIOMETER CORRECTION -0.001 MW/CM2

T=0 AT 915 PDT

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	302.2
REL HUM	%	AVERAGE	56.96
SSPOWER	KW	AVERAGE	14.46
RADIOM	MW/CM2	AVERAGE	0.362
H2O	PPM	AVERAGE	2.805E 04
NO	PPM	INIT COND	0.087
NO2-CORR	PPM	INIT COND	0.011
N-C4	PPM	INIT COND	1.961
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.196
430.	1.812
403.	1.598
380.	1.400
370.	1.273
360.	1.100
350.	1.000
340.	0.836
330.	0.617
320.	0.381
310.	0.167
300.	0.032
290.	0.0

K1=0.33 MIN-1

SAMPLING RATE = 1.771 L/MIN

71 GC SAMPLES TAKEN

EC -178
N-BUTANE
1976 JUL 13

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM
915	0.	0.0	0.087	0.011	0.099	1.96
930	15.	0.0	0.067	0.030	0.097	1.94
945	30.	0.012	0.042	0.050	0.095	1.92
1000	45.	0.020	0.030	0.062	0.092	1.90
1015	60.	0.042	0.023	0.064	0.088	1.86
1030	75.	0.061	0.018	0.066	0.083	1.85
1045	90.	0.088	0.018	0.062	0.080	1.84
1100	105.	0.103	0.017	0.059	0.076	1.81
1115	120.	0.127	0.016	0.055	0.071	1.80
1130	135.	0.142	0.017	0.050	0.066	1.78
1145	150.	0.166	0.015	0.048	0.063	1.77
1200	165.	0.188	0.013	0.046	0.058	******
1215	180.	0.208	0.011	0.048	0.059	1.73
1230	195.	0.225	0.014	0.035	0.049	1.71
1245	210.	0.247	0.011	0.034	0.045	1.70
1300	225.	0.259	0.011	0.029	0.040	1.67
1315	240.	0.278	0.011	0.026	0.036	1.66
1330	255.	0.291	0.010	0.020	0.031	1.64
1345	270.	0.305	0.010	0.015	0.025	1.62
1400	285.	0.325	0.013	0.010	0.024	1.61
1415	300.	0.337	0.010	0.011	0.021	1.60
1430	315.	0.347	0.010	0.009	0.019	1.58
1445	330.	0.352	0.010	0.006	0.016	1.57
1500	345.	0.362	0.010	0.004	0.014	1.55
1515	360.	0.366	0.009	0.002	0.012	1.55
1530	375.	0.371	0.009	0.002	0.012	1.52
1545	390.	0.374	0.009	0.001	0.010	1.51
1600	405.	0.376	0.010	0.0	0.009	1.50
1615	420.	0.379	0.010	0.0	0.008	1.50
1630	435.	0.379	0.010	0.0	0.006	1.48
1645	450.	0.381	0.013	0.0	0.005	1.47
1700	465.	0.381	0.010	0.0	0.005	1.47
1715	480.	0.381	0.009	0.0	0.005	1.45
1730	495.	0.383	0.009	0.0	0.006	1.44

EC -178
N-BUTANE
1976 JUL 13

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR	C4-N-1 PPM PANALYZR
915	0.	******	0.000	0.0	0.0010	0.0001	0.0009	0.0001	0.0000	0.0	0.0	0.0	0.0
930	15.	2.15	******	******	******	******	******	******	******	******	******	******	******
945	30.	2.19	0.001	******	******	0.0003	0.0025	0.0007	0.0105	0.0	0.0019	0.0021	0.0008
1000	45.	2.15	******	******	******	******	******	******	******	******	******	******	******
1015	60.	2.20	0.003	0.024	0.0376	0.0007	0.0028	0.0015	0.0237	0.0010	0.0043	0.0042	0.0009
1030	75.	2.22	******	******	******	******	******	******	******	******	******	******	******
1045	90.	2.16	0.005	******	0.0378	0.0011	0.0041	0.0020	0.0354	0.0010	0.0051	0.0056	0.0007
1100	105.	2.17	******	******	******	******	******	******	******	******	******	******	******
1115	120.	2.19	0.009	0.010	0.0455	0.0015	0.0048	0.0024	0.0391	0.0010	0.0065	0.0073	0.0010
1130	135.	2.25	******	******	******	******	******	******	******	******	******	******	******
1145	150.	2.25	0.013	******	0.0543	0.0019	******	0.0028	0.0435	0.0010	0.0078	0.0086	0.0010
1200	165.	2.24	******	******	******	******	******	******	******	******	******	******	******
1215	180.	2.26	0.017	0.010	0.0582	0.0020	0.0056	0.0030	0.0495	0.0010	0.0092	0.0098	0.0012
1230	195.	2.30	******	******	******	******	******	******	******	******	******	******	******
1245	210.	2.31	0.021	******	0.0686	0.0027	0.0055	0.0035	0.0577	0.0015	0.0103	0.0114	0.0014
1300	225.	2.36	******	******	******	******	******	******	******	******	******	******	******
1315	240.	2.38	0.026	0.016	0.0673	0.0026	0.0046	0.0035	0.0546	0.0015	******	0.0122	******
1330	255.	2.39	******	******	******	******	******	******	******	******	******	******	******
1345	270.	2.38	0.031	******	0.0781	0.0031	0.0065	0.0039	0.0690	0.0020	0.0124	0.0135	0.0019
1400	285.	2.43	******	******	******	******	******	******	******	******	******	******	******
1415	300.	2.38	0.034	0.010	0.0792	0.0030	0.0061	0.0041	0.0687	0.0020	0.0132	0.0144	0.0014
1430	315.	2.41	******	******	******	******	******	******	******	******	******	******	******
1445	330.	2.44	0.037	******	0.0855	0.0037	0.0079	0.0043	0.0810	0.0015	0.0146	0.0152	0.0016
1500	345.	2.42	******	******	******	******	******	******	******	******	******	******	******
1515	360.	2.50	0.039	0.018	0.0887	0.0038	0.0078	0.0045	0.0827	0.0020	0.0148	0.0159	0.0015
1530	375.	2.46	******	******	******	******	******	******	******	******	******	******	******
1545	390.	2.50	0.040	******	0.0871	0.0039	0.0087	0.0046	0.0863	0.0020	0.0151	0.0161	0.0016
1600	405.	2.53	******	******	******	******	******	******	******	******	******	******	******
1615	420.	2.57	0.043	******	0.0831	0.0039	0.0066	0.0043	0.0739	0.0015	0.0157	0.0164	0.0015
1630	435.	2.53	******	******	******	******	******	******	******	******	******	******	******
1645	450.	2.54	0.045	******	0.0916	0.0041	0.0090	0.0048	0.0907	0.0020	0.0157	0.0168	0.0021
1700	465.	2.58	******	0.0	******	******	******	******	******	******	******	******	******
1715	480.	2.66	0.045	******	0.0857	0.0037	0.0074	0.0047	0.0786	0.0020	0.0159	0.0170	0.0020
1730	495.	2.65	******	******	******	******	******	******	******	******	******	******	******

EC -178
N-BUTANE
1976 JUL 13

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
915	0.	82.8	45.0	******	******	20.00
930	15.	85.0	46.0	16.00	0.358	******
945	30.	84.8	48.5	******	0.361	******
1000	45.	85.2	51.0	******	0.353	******
1015	60.	85.7	54.0	14.00	0.351	20.00
1030	75.	85.0	55.0	******	0.348	******
1045	90.	85.5	57.0	******	0.351	******
1100	105.	89.2	58.5	******	0.375	******
1115	120.	89.2	59.5	******	0.356	20.00
1130	135.	89.2	60.0	******	******	******
1145	150.	89.9	61.0	******	******	******
1200	165.	90.6	61.0	******	0.363	******
1215	180.	90.9	60.5	14.20	0.356	20.00
1230	195.	91.4	60.5	******	******	******
1245	210.	92.1	60.0	******	******	******
1300	225.	92.3	60.0	******	******	******
1315	240.	92.8	60.5	14.10	0.348	20.00
1330	255.	92.8	60.5	******	0.368	******
1345	270.	92.8	61.0	******	0.363	******
1400	285.	92.8	61.0	******	0.358	******
1415	300.	92.8	61.5	14.20	0.346	20.00
1430	315.	92.8	61.0	******	0.361	******
1445	330.	93.1	61.0	******	0.361	******
1500	345.	93.1	61.0	******	0.368	******
1515	360.	93.3	60.5	14.20	0.361	20.00
1530	375.	93.3	60.5	******	0.373	******
1545	390.	93.8	60.0	******	0.365	******
1600	405.	94.0	60.0	******	0.370	******
1615	420.	94.0	51.0	14.50	0.373	20.00
1630	435.	94.8	52.0	******	0.365	******
1645	450.	94.8	52.5	******	0.373	******
1700	465.	95.0	52.0	******	0.370	20.00
1715	480.	95.0	52.0	14.50	0.387	******
1730	495.	89.6	51.0	******	0.368	******

EC -216
PROPENE
1977 FEB 14

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER
HCHO ABSORBANCE CORRECTED FOR 15 ML H2O USED IN BUBBLERS
BRADY 1003
CO FACTOR 1.8/0.35; CH4 1.120/0.955; THC 1.120/2.41

T=0 AT 945 PST

	CALIB#
PAN	10
REL HUM	2
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	302.7
REL HUM	%	AVERAGE	55.24
SSPOWER	KW	AVERAGE	17.44
RADIOM	MW/CM2	AVERAGE	0.361
H2O	PPM	AVERAGE	2.274E 04
NO	PPM	INIT COND	0.412
NO2-CORR	PPM	INIT COND	0.103
PROPENE	PPM	INIT COND	0.503
CO	PPM	INIT COND	2.186
HCHO	PPM	INIT COND	0.030
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	0.920

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.589
430.	1.638
403.	1.532
380.	1.350
370.	1.228
360.	1.087
350.	1.000
340.	0.823
330.	0.609
320.	0.349
310.	0.137
300.	0.023
290.	0.000
280.	0.0

K1=0.43 MIN-1

SAMPLING RATE = 1.830 L/MIN

68 GC SAMPLES TAKEN

EC -216
PROPENE
1977 FEB 14

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
945	0.	0.0	0.412	0.103	0.518	0.503
1000	15.	0.0	0.338	0.173	0.504	0.460
1015	30.	0.0	0.266	0.231	0.498	0.392
1030	45.	0.007	0.194	0.286	0.481	0.370
1045	60.	0.015	0.136	0.326	0.465	0.339
1100	75.	0.032	0.093	0.351	0.442	0.306
1115	90.	0.056	0.062	0.365	0.426	0.273
1130	105.	0.085	0.042	0.367	0.407	0.252
1145	120.	0.115	0.031	0.351	0.384	0.216
1200	135.	0.159	0.027	0.334	0.357	0.195
1215	150.	0.186	0.023	0.311	0.333	0.159
1230	165.	0.217	0.018	0.292	0.311	0.142
1245	180.	0.249	0.015	0.273	0.286	0.123
1300	195.	0.286	0.012	0.250	0.261	0.098
1315	210.	0.308	0.011	0.228	0.239	0.084
1330	225.	0.337	0.007	0.204	0.211	0.068
1345	240.	******	0.009	0.176	0.183	0.054
1400	255.	0.381	0.007	0.158	0.164	0.045
1415	270.	******	0.007	0.137	0.144	0.036
1430	285.	0.427	0.007	0.112	0.118	0.029
1445	300.	0.452	0.004	0.086	0.091	0.023
1500	315.	0.476	0.006	0.079	0.085	0.017
1515	330.	0.493	0.004	0.071	0.076	0.014
1530	345.	0.508	0.005	0.055	0.057	0.010
1545	360.	0.523	0.005	0.039	0.044	0.008
1600	375.	0.535	0.005	0.036	0.039	0.006
1615	390.	0.545	0.004	0.034	0.031	0.004
1630	405.	0.55	0.006	0.030	0.031	0.003
1645	420.	0.557	0.004	0.032	0.034	0.003
1700	435.	0.559	0.006	0.022	0.026	0.002
1715	450.	0.562	0.006	0.019	0.023	0.002
1730	465.	0.564	0.004	0.012	0.018	0.001
1745	480.	0.562	0.005	0.012	0.016	0.001
1800	495.	0.559	0.005	0.011	0.013	******

EC -216
PROPENE
1977 FEB 14

CLOCK TIME	ELAPSED T(MIN)	CO PPM	THC PPMC	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	METHANE PPM
945	0.	2.19	2.18	0.000	0.030	0.002	0.0002	0.0016	0.0001	0.0001	******	0.0	0.92
1000	15.	2.02	2.08	******	******	******	******	******	******	******	******	******	0.93
1015	30.	2.26	2.02	0.001	******	0.060	0.0005	0.0030	0.0001	0.0001	******	0.0	1.09
1030	45.	2.14	1.96	******	******	******	******	******	******	******	******	******	0.97
1045	60.	2.47	1.86	0.006	0.062	0.102	0.0010	0.0046	0.0002	0.0001	******	0.0	0.99
1100	75.	2.21	1.81	******	******	******	******	******	******	******	******	******	0.98
1115	90.	2.22	1.78	0.016	******	0.147	0.0018	0.0069	0.0003	0.0001	0.0006	0.0001	1.22
1130	105.	2.27	1.74	******	******	******	******	******	******	******	******	******	1.01
1145	120.	2.24	1.66	0.028	0.142	0.158	0.0023	0.0108	0.0005	0.0001	0.0010	0.0005	1.05
1200	135.	2.32	1.60	******	******	******	******	******	******	******	******	******	0.92
1215	150.	2.36	1.59	0.043	******	0.202	0.0031	0.0117	0.0007	******	0.0016	0.0007	0.93
1230	165.	2.49	1.62	******	******	******	******	******	******	******	******	******	1.13
1245	180.	2.40	1.51	0.057	0.173	0.183	0.0033	0.0143	0.0010	0.0002	0.0020	0.0008	0.91
1300	195.	2.41	1.53	******	******	******	******	******	******	******	******	******	1.06
1315	210.	2.46	1.49	0.069	******	0.174	0.0033	0.0168	0.0011	0.0003	0.0021	0.0011	1.00
1330	225.	2.45	1.46	******	******	******	******	******	******	******	******	******	1.12
1345	240.	2.89	1.51	0.090	0.177	0.177	0.0037	0.0142	0.0013	0.0003	0.0123	0.0011	0.65
1400	255.	2.59	1.47	******	******	******	******	******	******	******	******	******	1.05
1415	270.	2.64	1.49	0.102	******	0.161	0.0042	0.0185	0.0016	0.0003	0.0020	0.0011	1.00
1430	285.	2.61	1.45	******	******	******	******	******	******	******	******	******	0.93
1445	300.	2.60	1.47	0.129	0.181	0.141	0.0035	0.0188	0.0016	0.0004	0.0025	0.0012	0.93
1500	315.	2.60	1.46	******	******	******	******	******	******	******	******	******	1.03
1515	330.	2.66	1.45	0.131	******	0.134	0.0036	0.0146	0.0017	0.0004	0.0021	0.0013	1.10
1530	345.	2.86	1.44	******	******	******	******	******	******	******	******	******	1.17
1545	360.	2.75	1.46	0.146	0.160	0.113	0.0037	0.0194	0.0019	0.0004	0.0024	0.0012	0.98
1600	375.	2.83	1.48	******	******	******	******	******	******	******	******	******	1.02
1615	390.	2.86	1.50	0.151	******	0.109	0.0041	0.0211	0.0022	0.0005	0.0027	0.0013	1.01
1630	405.	2.98	1.47	******	******	******	******	******	******	******	******	******	1.07
1645	420.	2.85	1.49	0.145	0.133	0.105	0.0042	0.0181	0.0021	0.0004	0.0024	0.0013	1.25
1700	435.	2.84	1.47	******	******	******	******	******	******	******	******	******	1.10
1715	450.	2.89	1.48	0.154	******	0.080	0.0038	0.0228	0.0021	0.0006	0.0031	0.0014	1.11
1730	465.	2.88	1.48	******	******	******	******	******	******	******	******	******	1.00
1745	480.	2.79	1.49	0.154	0.148	0.077	0.0039	0.0181	0.0020	0.0004	0.0023	******	1.05
1800	495.	2.89	1.53	******	******	******	******	******	******	******	******	******	1.09

EC -216
PROPENE
1977 FEB 14

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	83.5	43.5	17.47	******	15.00
1000	15.	85.5	45.0	17.51	0.364	******
1015	30.	85.2	48.0	17.60	0.362	******
1030	45.	85.5	52.0	******	0.362	******
1045	60.	85.7	56.0	17.56	0.359	30.00
1100	75.	86.0	58.5	******	******	******
1115	90.	85.7	59.5	******	******	******
1130	105.	85.7	60.0	******	******	******
1145	120.	85.2	60.0	17.55	0.364	30.00
1200	135.	85.5	60.5	******	******	******
1215	150.	85.7	60.5	******	******	******
1230	165.	85.7	60.5	******	******	******
1245	180.	85.5	60.5	17.22	0.357	30.00
1300	195.	85.5	60.5	******	******	******
1315	210.	84.5	60.0	******	******	******
1330	225.	84.8	60.0	******	******	******
1345	240.	85.2	60.5	17.34	0.366	30.00
1400	255.	84.8	60.0	******	******	******
1415	270.	85.2	60.0	******	******	******
1430	285.	85.2	60.0	******	******	******
1445	300.	85.5	60.0	17.43	0.369	30.00
1500	315.	85.7	60.5	******	******	******
1515	330.	85.2	60.5	******	******	******
1530	345.	85.5	60.5	******	******	******
1545	360.	85.5	60.5	17.51	0.366	30.00
1600	375.	86.2	60.0	******	******	******
1615	390.	86.0	60.0	******	******	******
1630	405.	86.5	60.0	******	******	******
1645	420.	86.5	59.5	17.43	0.366	20.00
1700	435.	86.0	59.5	******	******	******
1715	450.	86.0	59.5	******	0.359	******
1730	465.	85.7	60.0	******	******	******
1745	480.	85.5	60.0	17.22	0.352	30.00
1800	495.	85.0	60.5	******	0.354	******

EC -217
PROPENE + ACETALDEHYDE
1977 FEB 15

BEGIN IRRADIATION 0930; C.25 INCH PYREX FILTER
HCHO SAMPLE AT 0745 GAVE 0.00 ABSORBANCE
BRADY 1663 & 1193
CO FACTOR 1.8/0.34; CH4 1.120/0.955; THC 1.120/2.41

T=0 AT 930 PST

	CALIB#
REL HUM	2
REL HUM	5
HCHO	1

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	51.51
REL HUM	%	AVERAGE	51.51
SSPOWER	KW	AVERAGE	17.60
RADIOM	MW/CM2	AVERAGE	0.362
H2O	PPM	AVERAGE	2.179E 04
NO	PPM	INIT COND	0.241
NO2-CORR	PPM	INIT COND	0.238
PROPENE	PPM	INIT COND	0.099
ACETALD	PPM	INIT COND	0.146
CO	PPM	INIT COND	1.759
HCHO	PPM	INIT COND	0.003
ACETONE	PPM	INIT COND	0.004
BUTYRAL	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.120

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.584
430.	1.628
403.	1.536
380.	1.338
370.	1.228
360.	1.091
350.	1.000
340.	0.832
330.	0.607
320.	0.345
310.	0.137
300.	0.023
290.	0.000
280.	0.0

K1=0.43 MIN-1

SAMPLING RATE = 1.608 L/MIN

77 GC SAMPLES TAKEN

EC -217
PROPENE + ACETALDEHYDE
1977 FEB 15

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	ACETALD PPM
930	0.	0.0	0.241	0.238	0.478	0.099	0.146
945	15.	0.002	0.227	0.233	0.460	******	******
1000	30.	0.007	0.209	0.236	0.450	0.077	0.149
1015	45.	0.005	0.197	0.243	0.438	******	******
1030	60.	0.007	0.182	0.248	0.431	0.065	0.151
1045	75.	0.007	0.167	0.256	0.425	******	******
1100	90.	0.007	0.155	0.263	0.418	0.059	0.135
1115	105.	0.007	0.145	0.262	0.407	******	******
1130	120.	0.012	0.136	0.263	0.399	0.048	0.151
1145	135.	0.012	0.128	0.266	0.394	******	******
1200	150.	0.017	0.118	0.269	0.388	0.042	0.143
1215	165.	0.022	0.114	0.265	0.378	******	******
1230	180.	0.022	0.100	0.272	0.371	0.035	0.141
1245	195.	0.020	0.098	0.265	0.362	******	******
1300	210.	0.022	0.089	0.268	0.355	0.030	0.138
1315	225.	0.022	0.083	0.263	0.346	******	******
1330	240.	******	0.071	0.271	0.340	0.025	0.128
1345	255.	0.029	0.066	0.267	0.333	******	******
1400	270.	0.037	0.067	0.257	0.322	0.021	0.126
1415	285.	0.042	0.056	0.263	0.318	******	******
1430	300.	0.044	0.061	0.253	0.311	0.018	0.116
1445	315.	0.051	0.050	0.255	0.304	******	******
1500	330.	0.054	0.049	0.247	0.296	0.015	0.108
1515	345.	0.054	0.050	0.242	0.289	******	******
1530	360.	0.059	0.045	0.238	0.283	0.013	0.106
1545	375.	0.059	0.043	0.235	0.276	******	******
1600	390.	0.068	0.044	0.227	0.271	0.011	0.104
1615	405.	0.066	0.033	0.231	0.265	******	******
1630	420.	0.078	0.038	0.221	0.257	0.009	0.095
1645	435.	0.078	0.029	0.222	0.250	******	******
1700	450.	0.081	0.034	0.213	0.243	0.008	0.090
1715	465.	0.090	0.031	0.208	0.237	******	******
1730	480.	0.088	0.026	0.209	0.233	0.006	0.084
1745	495.	0.095	0.028	0.198	0.225	******	******
1800	510.	******	0.028	0.190	0.217	0.005	0.078
1815	525.	0.100	0.022	0.188	0.213	******	******
1830	540.	0.098	0.022	0.184	0.205	0.004	0.076
1845	555.	0.107	0.023	0.179	0.200	******	******
1900	570.	0.107	0.018	0.171	0.191	0.003	0.070
1915	585.	0.112	0.016	0.170	0.184	******	******
1930	600.	0.120	0.016	0.165	0.181	0.003	0.068
1945	615.	0.122	0.015	0.160	0.175	******	******
2000	630.	0.122	0.012	0.157	0.170	0.002	0.062
2015	645.	0.129	0.015	0.150	0.164	******	******
2030	660.	0.137	0.015	0.144	0.158	0.002	0.060
2045	675.	0.134	0.011	0.140	0.151	******	******
2100	690.	0.144	0.015	0.137	0.150	0.001	0.056
2115	705.	0.144	0.011	0.133	0.144	******	******
2130	720.	0.149	0.009	0.127	0.135	0.001	0.053

EC -217
PROPENE + ACETALDEHYDE
1977 FEB 15

CLOCK TIME	ELAPSED T(MIN)	CO PPM	THC PPMC	PAN PPM	HCHO PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	METHANE PPM
930	0.	1.76	1.18	0.0	0.003	******	0.0044	0.0008	0.0	******	0.0	1.12
945	15.	1.66	1.24	******	******	******	******	******	******	******	******	1.09
1000	30.	1.66	1.17	0.003	******	0.0005	0.0074	0.0009	0.0	******	0.0	0.98
1015	45.	1.71	1.24	******	******	******	******	******	******	******	******	1.08
1030	60.	1.84	1.21	0.005	0.016	0.0007	0.0090	0.0005	0.0	******	0.0	1.03
1045	75.	1.68	1.19	******	******	******	******	******	******	******	******	1.02
1100	90.	1.82	1.19	0.006	******	0.0008	0.0136	0.0004	0.0001	******	0.0003	1.01
1115	105.	1.73	1.14	******	******	******	******	******	******	******	******	1.13
1130	120.	1.85	1.15	0.007	0.027	0.0010	0.0140	0.0006	0.0	******	0.0004	0.97
1145	135.	1.76	1.13	******	******	******	******	******	******	******	******	1.12
1200	150.	1.94	1.14	0.008	******	0.0014	0.0138	0.0005	0.0001	******	0.0005	1.06
1215	165.	1.76	1.11	******	******	******	******	******	******	******	******	1.02
1230	180.	1.82	1.15	0.009	0.024	0.0013	0.0110	0.0005	0.0	******	0.0006	1.02
1245	195.	2.09	1.12	******	******	******	******	******	******	******	******	0.95
1300	210.	1.77	1.10	0.010	******	0.0016	0.0145	0.0006	0.0	******	******	1.09
1315	225.	1.93	1.15	******	******	******	******	******	******	******	******	1.06
1330	240.	1.88	1.08	0.010	0.040	0.0014	0.0165	0.0005	0.0	******	0.0007	0.99
1345	255.	1.73	1.17	******	******	******	******	******	******	******	******	1.01
1400	270.	1.97	1.10	0.011	******	0.0018	0.0201	0.0006	0.0	******	0.0008	1.01
1415	285.	2.02	1.11	******	******	******	******	******	******	******	******	0.97
1430	300.	1.89	1.11	0.011	0.027	0.0017	0.0201	0.0005	0.0	******	0.0008	0.98
1445	315.	2.04	1.08	******	******	******	******	******	******	******	******	0.98
1500	330.	2.13	1.08	0.012	******	0.0019	0.0178	0.0001	0.0	******	0.0008	1.05
1515	345.	******	1.53	******	******	******	******	******	******	******	******	0.31
1530	360.	1.94	1.11	0.014	0.027	0.0021	0.0205	0.0007	0.0	0.0007	0.0009	1.18
1545	375.	1.97	1.08	******	******	******	******	******	******	******	******	0.86
1600	390.	2.08	1.14	0.014	******	0.0020	0.0180	0.0007	0.0	0.0010	0.0010	1.13
1615	405.	1.90	1.09	******	******	******	******	******	******	******	******	1.08
1630	420.	2.20	1.13	0.015	0.027	0.0021	0.0228	0.0008	0.0	0.0008	0.0011	1.07
1645	435.	1.98	1.11	******	******	******	******	******	******	******	******	1.00
1700	450.	2.12	1.11	0.016	******	0.0023	0.0205	0.0007	0.0	0.0007	0.0011	1.15
1715	465.	2.02	1.12	******	******	******	******	******	******	******	******	1.02
1730	480.	1.94	1.09	0.015	0.032	0.0023	0.0253	0.0009	0.0	0.0008	0.0011	0.99
1745	495.	2.04	1.08	******	******	******	******	******	******	******	******	1.03
1800	510.	2.13	1.11	0.017	******	0.0022	0.0191	0.0007	0.0	0.0007	0.0012	1.08
1815	525.	2.13	1.08	******	******	******	******	******	******	******	******	1.03
1830	540.	2.20	1.07	0.017	0.030	0.0026	0.0257	0.0009	0.0	0.0009	0.0013	0.96
1845	555.	2.19	1.10	******	******	******	******	******	******	******	******	1.13
1900	570.	2.39	1.08	0.017	******	0.0026	0.0289	0.0011	0.0	******	0.0013	0.95
1915	585.	2.13	1.07	******	******	******	******	******	******	******	******	0.99
1930	600.	2.15	1.13	0.018	0.040	0.0027	0.0261	0.0010	0.0	0.0007	0.0013	1.16
1945	615.	2.11	1.09	******	******	******	******	******	******	******	******	1.00
2000	630.	2.26	1.11	******	******	0.0029	0.0337	0.0011	0.0	******	******	1.08
2015	645.	2.20	1.04	******	******	******	******	******	******	******	******	0.94
2030	660.	2.38	1.04	******	0.027	0.0029	0.0243	0.0009	0.0	0.0008	******	1.03
2045	675.	2.34	1.08	******	******	******	******	******	******	******	******	1.00
2100	690.	2.30	1.09	******	******	0.0030	0.0266	0.0009	0.0	0.0008	******	1.08
2115	705.	2.41	1.04	******	******	******	******	******	******	******	******	0.97
2130	720.	2.38	1.05	0.018	0.027	0.0034	0.0403	0.0013	0.0	0.0010	0.0014	0.95

EC -217
PROPENE + ACETALDEHYDE
1977 FEB 15

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM % # 1663	REL HUM % # 1193	SSPOWER KW	RADION MW/CM2	HCHO VOL L
930	0.	84.5	50.0	41.0	17.56	******	15.00
945	15.	85.7	50.0	45.0	******	0.364	******
1000	30.	86.0	50.0	46.0	17.56	0.359	******
1015	45.	86.0	51.0	46.0	******	0.364	******
1030	60.	85.7	51.0	54.0	17.64	0.364	15.00
1045	75.	85.7	51.0	54.0	******	******	******
1100	90.	86.0	51.0	54.0	******	******	******
1115	105.	86.0	52.0	54.0	******	******	******
1130	120.	86.2	52.0	54.0	17.60	0.364	15.00
1145	135.	86.5	52.0	54.0	******	******	******
1200	150.	86.5	52.0	54.0	******	******	******
1215	165.	87.0	52.0	54.0	******	******	******
1230	180.	86.2	52.0	54.0	17.64	0.366	15.00
1245	195.	86.2	52.0	54.0	******	******	******
1300	210.	86.2	52.0	54.0	******	******	******
1315	225.	86.2	52.0	54.0	******	******	******
1330	240.	86.2	52.0	54.0	17.39	0.357	15.00
1345	255.	86.2	52.0	54.0	******	0.354	******
1400	270.	86.2	52.0	54.0	******	******	******
1415	285.	86.5	51.0	54.0	******	******	******
1430	300.	86.5	52.0	54.0	17.43	0.364	15.00
1445	315.	87.0	51.0	54.0	******	******	******
1500	330.	86.5	51.0	54.0	******	******	******
1515	345.	87.2	52.0	54.0	******	******	******
1530	360.	87.4	51.0	54.0	17.89	0.369	15.00
1545	375.	87.0	52.0	54.0	******	0.366	******
1600	390.	86.5	52.0	54.0	******	******	******
1615	405.	86.5	52.0	54.0	******	******	******
1630	420.	86.2	52.0	54.0	17.51	0.369	15.00
1645	435.	86.5	52.0	54.0	******	******	******
1700	450.	87.2	51.0	54.0	18.06	******	******
1715	465.	86.5	52.0	54.0	17.17	0.354	******
1730	480.	87.0	52.0	54.0	18.06	0.371	15.00
1745	495.	86.0	51.0	54.0	17.64	0.357	******
1800	510.	86.2	51.0	54.0	******	0.366	******
1815	525.	86.7	51.0	54.0	******	******	******
1830	540.	86.5	51.0	54.0	18.02	0.366	15.00
1845	555.	86.5	52.0	54.0	17.39	0.352	******
1900	570.	86.5	52.0	54.0	******	0.357	******
1915	585.	86.2	51.0	54.0	******	******	******
1930	600.	86.7	52.0	54.0	17.93	0.371	15.00
1945	615.	86.0	51.0	54.0	17.30	0.362	******
2000	630.	86.2	52.0	54.0	******	0.359	******
2015	645.	86.0	52.0	54.0	17.22	0.354	******
2030	660.	86.2	52.0	54.0	17.22	0.366	15.00
2045	675.	86.5	51.0	54.0	17.72	0.362	******
2100	690.	86.5	52.0	54.0	******	******	******
2115	705.	86.5	51.0	54.0	******	0.359	******
2130	720.	86.0	51.0	54.0	17.60	0.357	15.00

EC -230
PROPENE
1977 AUG 9

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER
OZONE MONITORED BY BOTH DASIBI 1212 (D-1212) AND DASIBI 1070 (D-1070)
BRADY 1663 (1977 AUG 2e CALIb); TECO 14B; BECKMAN 6800
CO FACTOR 1.6/3.25

T=0 AT 945 PDT

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	302.8
REL HUM	%	AVERAGE	51.22
SSPOWER	KW	AVERAGE	16.18
RADIOM	MW/CM2	AVERAGE	0.229
H2O	PPM	AVERAGE	2.105E 04
NO	PPM	INIT COND	0.392
NO2-CORR	PPM	INIT COND	0.128
PROPENE	PPM	INIT COND	0.546
CO	PPM	INIT COND	1.943
HCHO	PPM	INIT COND	0.282
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.255
430.	1.971
403.	1.763
380.	1.455
370.	1.301
360.	1.133
350.	1.000
340.	0.793
330.	0.577
320.	0.317
310.	0.128
300.	0.025
290.	0.002
280.	0.002
270.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 2.274 L/MIN

01 GC SAMPLES TAKEN

EC -230
PROPENE
1977 AUG 9

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM D-1212	OZONE PPM D-1070	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
945	0.	0.0	0.0	0.392	0.128	0.520	0.546
1000	15.	0.0	0.0	0.340	0.167	0.514	0.522
1015	30.	0.0	0.0	0.300	0.207	0.507	******
1030	45.	0.0	0.0	0.259	0.244	0.503	0.436
1045	60.	0.0	0.005	0.209	0.282	0.492	0.421
1100	75.	0.002	0.010	0.162	0.318	0.479	0.391
1115	90.	0.010	0.010	0.125	0.342	0.467	0.351
1130	105.	0.022	0.022	0.095	0.351	0.446	0.333
1145	120.	0.037	0.049	0.075	0.364	0.435	0.309
1200	135.	0.051	0.056	0.061	0.360	0.420	0.273
1215	150.	0.071	0.083	0.049	0.354	0.401	0.252
1230	165.	0.093	0.103	0.038	0.349	0.385	0.230
1245	180.	0.112	0.125	0.032	0.340	0.371	0.204
1300	195.	0.132	0.137	0.026	0.326	0.353	0.181
1315	210.	0.149	0.159	0.024	0.310	0.333	0.162
1330	225.	0.171	0.178	0.022	0.292	0.312	0.143
1345	240.	0.186	0.193	0.018	0.277	0.294	0.123
1400	255.	0.205	0.210	0.017	0.260	0.275	0.109
1415	270.	0.220	0.225	0.016	0.239	0.255	0.094
1430	285.	0.234	0.247	0.015	0.225	0.237	0.080
1445	300.	0.252	0.254	0.013	0.208	0.219	0.071
1500	315.	0.261	0.266	0.012	0.191	0.202	0.061
1515	330.	0.274	0.286	0.012	0.173	0.185	0.051
1530	345.	0.286	0.286	0.012	0.157	0.168	0.044
1545	360.	0.298	0.305	0.011	0.141	0.150	0.037
1600	375.	0.313	0.315	0.011	0.128	0.138	0.031
1615	390.	0.325	0.327	0.010	0.114	0.122	0.027
1630	405.	0.335	0.337	0.010	0.101	0.109	0.022
1645	420.	0.342	0.344	0.010	0.089	0.097	0.018

EC -230
PROPENE
1977 AUG 9

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM
945	0.	1.94	C.000	0.262	0.002	0.0001	0.0015	0.0001	0.0001	0.0	0.0
1000	15.	******	******	******	******	******	******	******	******	******	******
1015	30.	1.94	C.001	******	0.048	0.0004	0.0022	0.0001	0.0001	0.0002	0.0
1030	45.	******	******	******	******	******	******	******	******	******	******
1045	60.	1.97	C.003	0.123	0.098	C.0009	0.0031	0.0001	0.0002	0.0005	0.0
1100	75.	******	******	******	******	******	******	******	******	******	******
1115	90.	1.98	0.007	******	0.136	0.0013	0.0042	0.0002	0.0001	0.0011	0.0002
1130	105.	******	******	******	******	******	******	******	******	******	******
1145	120.	2.03	0.013	0.171	0.178	0.0018	0.0071	0.0003	******	0.0013	0.0002
1200	135.	******	******	******	******	******	******	******	******	******	******
1215	150.	2.03	0.021	******	0.197	0.0022	0.0068	0.0004	******	0.0017	0.0002
1230	165.	******	******	******	******	******	******	******	******	******	******
1245	180.	2.09	0.031	0.240	0.226	0.0029	0.0135	0.0006	0.0002	0.0023	0.0004
1300	195.	******	******	******	******	******	******	******	******	******	******
1315	210.	2.14	0.042	******	0.230	0.0034	0.0150	0.0007	******	0.0023	0.0007
1330	225.	******	******	******	******	******	******	******	******	******	******
1345	240.	2.20	C.052	C.228	0.260	0.0036	0.0184	0.0010	******	0.0029	0.0008
1400	255.	******	******	******	******	******	******	******	******	******	******
1415	270.	2.17	C.064	******	0.256	0.0040	0.0195	******	******	0.0032	0.0009
1430	285.	******	******	******	******	******	******	******	******	******	******
1445	300.	2.25	0.072	0.220	0.223	0.0038	0.0195	0.0011	******	0.0027	0.0009
1500	315.	******	******	******	******	******	******	******	******	******	******
1515	330.	2.31	C.081	******	0.217	0.0035	0.0190	0.0012	******	0.0027	0.0011
1530	345.	******	******	******	******	******	******	******	******	******	******
1545	360.	2.34	C.095	0.252	0.206	0.0040	0.0210	0.0014	******	0.0031	0.0011
1600	375.	******	******	******	******	******	******	******	******	******	******
1615	390.	2.37	C.103	******	0.195	0.0040	0.0208	0.0015	******	0.0026	0.0013
1630	405.	******	******	******	******	******	******	******	******	******	******
1645	420.	2.41	C.110	0.232	0.172	0.0036	0.0164	0.0014	******	0.0027	0.0015

EC -230
PROPENE
1977 AUG 9

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	84.8	47.0	15.88	0.225	10.00
1000	15.	85.5	47.5	16.08	0.232	******
1015	30.	85.5	49.0	16.00	0.230	******
1030	45.	85.7	49.5	15.99	0.225	******
1045	60.	84.0	50.5	15.99	0.227	20.00
1100	75.	84.3	52.0	16.42	0.230	******
1115	90.	85.0	53.0	******	******	******
1130	105.	85.2	53.0	******	******	******
1145	120.	85.5	52.5	16.19	0.227	20.00
1200	135.	86.2	52.0	******	******	******
1215	150.	85.0	52.0	******	******	******
1230	165.	85.0	52.5	******	******	******
1245	180.	85.2	53.0	15.99	0.222	20.00
1300	195.	85.7	52.5	16.35	0.232	******
1315	210.	84.5	52.5	******	******	******
1330	225.	85.2	53.0	******	******	******
1345	240.	86.0	53.0	16.53	0.234	20.00
1400	255.	86.5	52.5	16.20	0.232	******
1415	270.	85.2	52.5	******	0.227	******
1430	285.	85.5	53.0	******	******	******
1445	300.	85.7	52.5	16.07	0.225	20.00
1500	315.	84.0	53.5	******	******	******
1515	330.	84.8	53.5	******	******	******
1530	345.	85.2	53.5	******	******	******
1545	360.	85.5	53.0	16.20	******	20.00
1600	375.	86.2	52.5	******	0.227	******
1615	390.	87.0	51.5	******	******	******
1630	405.	85.5	51.0	******	******	******
1645	420.	85.5	52.0	16.20	******	20.00

EC -231
7-HYDROCARBON MIX #4
1977 AUG 10

BEGIN IRRADIATION 1030; 0.25 INCH PYREX FILTER
PEAKS ATTRIBUTED TO C6-N-D OBSERVED ON PANALYZER. DATA NOT QUANTIFIABLE.
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
N2 ACCIDENTLY FLUSHED INTO CHAMBER AT 4 L/MIN THROUGHOUT RUN
OZONE MONITORED BY BOTH DASIBI 1212 (D-1212) AND DASIBI 1070 (D-1070)
BRADY 1663 (1977 AUG 26 CALIB); TECO 148; BECKMAN 6800
CO FACTOR 1.6/0.335

T=0 AT 1030 PDT

	CALIB#
HCHO	1
PAN	9
REL INT	4

TS	DEG K	AVERAGE	302.8
REL HUM	%	AVERAGE	43.33
SSPOWER	KW	AVERAGE	16.24
RADIOM	MW/CM2	AVERAGE	0.229
H2O	PPM	AVERAGE	1.621E 04
NO	PPM	INIT COND	0.440
NO2-CORR	PPM	INIT COND	0.352
ETHENE	PPM	INIT COND	1.351
PROPENE	PPM	INIT COND	0.108
N-C4	PPM	INIT COND	1.130
T2-C4=	PPM	INIT COND	0.055
2,3-DMB	PPM	INIT COND	0.715
TOLUENE	PPM	INIT COND	0.121
M-XYL	PPM	INIT COND	0.108
CO	PPM	INIT COND	1.630
HCHO	PPM	INIT COND	0.020
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -231
7-HYDROCARBON MIX #4
1977 AUG 10

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.152
430.	1.911
403.	1.723
380.	1.421
370.	1.282
360.	1.132
350.	1.000
340.	0.789
330.	0.571
320.	0.314
310.	0.126
300.	0.023
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 4.000 L/MIN

54 GC SAMPLES TAKEN

EC -231
7-HYDROCARBON MIX #4
1977 AUG 10

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM D-1212	OZONE PPM D-1070	NO PPM	NO2-CORR PPM	NOx-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
1030	0.	0.000	0.0	0.440	0.052	0.492	1.051	0.108	1.130	0.055	0.715	0.121	0.108
1045	15.	0.000	0.0	0.377	0.103	0.483	******	******	******	******	******	******	******
1100	30.	0.000	0.0	0.291	0.180	0.472	0.987	0.097	1.083	0.042	0.687	0.115	0.097
1115	45.	0.002	0.007	0.182	0.272	0.453	******	******	******	******	******	******	******
1130	60.	0.032	0.039	0.073	0.360	0.433	0.922	0.081	1.051	0.022	0.644	0.109	0.084
1145	75.	0.117	0.120	0.035	0.365	0.400	******	******	******	******	******	******	******
1200	90.	0.205	0.215	0.021	0.344	0.364	0.831	0.060	0.991	0.003	0.598	0.099	0.069
1215	105.	0.291	0.296	0.021	0.307	0.325	******	******	******	******	******	******	******
1230	120.	0.362	0.371	0.012	0.275	0.286	0.757	0.042	0.963	0.0	0.565	0.096	0.058
1245	135.	0.427	0.432	0.011	0.244	0.252	******	******	******	******	******	******	******
1300	150.	0.493	0.489	0.010	0.211	0.218	0.676	0.027	0.924	0.0	0.531	0.091	0.050
1315	165.	0.525	0.528	0.009	0.179	0.185	******	******	******	******	******	******	******
1330	180.	0.562	0.567	0.007	0.150	0.158	0.610	0.017	0.884	0.0	0.500	0.086	0.043
1345	195.	0.591	0.591	0.007	0.124	0.130	******	******	******	******	******	******	******
1400	210.	0.606	0.611	0.007	0.101	0.107	0.542	0.011	0.856	0.0	0.475	0.082	0.038
1415	225.	0.620	0.620	0.012	0.086	0.098	******	******	******	******	******	******	******
1430	240.	0.623	0.620	0.013	0.071	0.083	0.492	0.007	0.824	0.0	0.453	0.077	0.033
1445	255.	0.616	0.618	0.011	0.057	0.067	******	******	******	******	******	******	******
1500	270.	0.613	0.611	0.005	0.055	0.060	0.453	******	0.805	0.0	0.432	0.075	0.031
1515	285.	0.603	0.601	0.006	0.050	0.055	******	******	******	******	******	******	******
1530	300.	0.589	0.589	0.006	0.045	0.048	0.415	0.003	0.775	0.0	0.415	0.071	0.028
1545	315.	0.579	0.576	0.011	0.037	0.048	******	******	******	******	******	******	******
1600	330.	0.564	0.562	0.006	0.045	0.048	0.378	0.002	0.756	0.0	0.401	0.069	0.026
1615	345.	0.552	0.550	0.005	0.039	0.044	******	******	******	******	******	******	******
1630	360.	0.540	0.537	0.006	0.039	0.042	0.348	0.001	0.734	0.0	0.384	0.067	0.024

EC -231
7-HYDROCARBON MIX #4
1977 AUG 10

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	C3-N-2 PPM C-600	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
1030	0.	1.63	0.000	0.020	******	******	0.001	******	0.0	******	0.0
1045	15.	******	******	******	******	******	******	******	******	******	******
1100	30.	1.61	0.001	******	******	******	0.012	0.0035	0.0003	0.0004	0.0005
1115	45.	******	******	******	******	******	******	******	******	******	******
1130	60.	1.61	0.006	0.077	******	******	0.045	0.0102	0.0010	0.0010	0.0011
1145	75.	******	******	******	******	******	******	******	******	******	******
1200	90.	1.63	0.023	******	******	******	0.053	0.0089	0.0021	0.0018	0.0016
1215	105.	******	******	******	******	******	******	******	******	******	******
1230	120.	1.65	0.039	0.296	******	******	0.110	0.0225	0.0023	0.0023	0.0025
1245	135.	******	******	******	******	******	******	******	******	******	******
1300	150.	1.71	0.047	******	******	******	0.142	0.0283	0.0033	0.0030	0.0036
1315	165.	******	******	******	******	******	******	******	******	******	******
1330	180.	1.76	0.062	0.371	******	******	0.142	0.0251	0.0036	0.0032	0.0042
1345	195.	******	******	******	******	******	******	******	******	******	******
1400	210.	1.78	0.079	******	******	******	0.176	0.0364	0.0040	0.0034	0.0045
1415	225.	******	******	******	******	******	******	******	******	******	******
1430	240.	1.84	0.088	0.423	0.029	0.0044	0.180	0.0361	0.0043	0.0034	0.0051
1445	255.	******	******	******	******	******	******	******	******	******	******
1500	270.	1.86	0.092	******	******	******	0.179	0.0385	0.0040	0.0038	0.0051
1515	285.	******	******	******	******	******	******	******	******	******	******
1530	300.	1.89	0.095	0.453	0.166	0.0092	0.174	0.0357	0.0040	0.0034	0.0053
1545	315.	******	******	******	******	******	******	******	******	******	******
1600	330.	1.90	0.094	******	******	******	0.175	0.0399	0.0040	0.0034	0.0054
1615	345.	******	******	******	******	******	******	******	******	******	******
1630	360.	1.93	0.092	0.381	0.141	0.0085	******	0.0419	0.0040	0.0036	0.0054

EC -231
7-HYDROCARBON MIX #4
1977 AUG 10

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADICN MW/CM2	HCHO VOL L
1030	0.	86.5	44.5	16.48	******	30.00
1045	15.	84.3	44.5	15.77	0.239	******
1100	30.	84.3	46.5	16.17	0.237	******
1115	45.	85.0	47.0	16.06	0.225	******
1130	60.	85.2	46.5	16.19	0.220	20.00
1145	75.	86.0	46.0	******	0.225	******
1200	90.	86.5	45.5	******	******	******
1215	105.	87.0	44.5	******	0.232	******
1230	120.	87.2	43.5	16.34	0.227	20.00
1245	135.	84.3	43.5	******	******	******
1300	150.	84.3	44.0	******	******	******
1315	165.	85.0	44.0	******	******	******
1330	180.	85.5	43.5	16.46	0.225	20.00
1345	195.	86.0	42.5	******	******	******
1400	210.	87.0	41.5	******	******	******
1415	225.	87.4	41.0	******	******	******
1430	240.	84.0	40.5	16.19	0.230	20.00
1445	255.	84.0	41.0	******	******	******
1500	270.	84.5	40.5	******	******	******
1515	285.	85.2	40.0	******	0.230	******
1530	300.	85.5	39.5	16.39	0.227	20.00
1545	315.	86.2	38.5	******	******	******
1600	330.	85.5	38.0	******	******	******
1615	345.	83.5	38.0	******	******	******
1630	360.	83.8	38.0	16.39	0.232	20.00

EC -232
7-HYDROCARBON MIX #1
1977 AUG 11

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER
PEAKS ATRRIBUTED TO C6-N-0 OBSERVED ON PANALYZER. DATA NOT QUANTIFIABLE.
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
JZONE MONITORED BY BOTH OASIBI 1212 (D-1212) AND OASIBI 1070 (D-1070)
BRADY 1663 (1977 AUG 26 CALIB); TECO 148; BECKMAN 6800
FACTORS: CO 1.6/0.339

T=0 AT 1000 PDT

	CALIB#
HCHO	1
PAN	9
REL INT	4

TS	DEG K	AVERAGE	302.5
REL HUM	%	AVERAGE	42.84
SSPOWER	KW	AVERAGE	16.53
RADIOM	MW/CM2	AVERAGE	0.230
H2O	PPM	AVERAGE	1.871E 04
NO	PPM	INIT COND	0.469
NO2-CORR	PPM	INIT COND	0.024
ETHENE	PPM	INIT COND	0.258
PROPENE	PPM	INIT COND	0.051
N-C4	PPM	INIT COND	1.102
T2-C4=	PPM	INIT COND	0.726
2,3-DMB	PPM	INIT COND	0.612
TOLUENE	PPM	INIT COND	0.332
M-XYL	PPM	INIT COND	0.029
CO	PPM	INIT COND	1.742
HCHO	PPM	INIT COND	0.009
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -232
7-HYDROCARBON MIX #1
1977 AUG 11

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.208
430.	2.000
403.	1.819
380.	1.515
370.	1.349
360.	1.208
350.	1.000
340.	0.850
330.	0.623
320.	0.345
310.	0.140
300.	0.025
290.	0.000
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 2.264 L/MIN

59 GC SAMPLES TAKEN

EC -232
7-HYDROCARBON MIX #1
1977 AUG 11

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM D-1212	OZONE PPM D-1070	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
1000	0.	0.0	0.0	0.469	0.024	0.492	0.258	0.051	1.102	0.026	0.612	0.032	0.029
1015	15.	0.0	0.0	0.431	0.053	0.483	******	******	******	******	******	******	******
1030	30.	0.0	0.0	0.394	0.089	0.485	0.254	0.047	1.087	0.021	0.592	0.031	0.027
1045	45.	0.0	0.0	0.343	0.136	0.481	******	******	******	******	******	******	******
1100	60.	0.0	0.0	0.292	0.180	0.473	0.240	0.042	1.070	0.016	0.576	0.030	0.024
1115	75.	0.0	0.002	0.238	0.224	0.462	******	******	******	******	******	******	******
1130	90.	0.005	0.005	0.188	0.264	0.452	0.228	0.036	1.040	0.010	0.551	0.029	0.022
1145	105.	0.012	0.015	0.151	0.289	0.441	******	******	******	******	******	******	******
1200	120.	0.022	0.024	0.115	0.317	0.431	0.214	0.031	1.012	0.006	0.529	0.028	0.019
1215	135.	0.037	0.039	0.080	0.339	0.419	******	******	******	******	******	******	******
1230	150.	0.049	0.056	0.066	0.340	0.406	0.205	0.027	1.002	0.003	0.514	0.028	0.018
1245	165.	0.068	0.073	0.053	0.344	0.396	******	******	******	******	******	******	******
1300	180.	0.093	0.098	0.051	0.332	0.383	0.194	0.023	0.976	0.001	0.493	0.026	0.016
1315	195.	0.110	0.112	0.040	0.330	0.369	******	******	******	******	******	******	******
1330	210.	0.127	0.129	0.035	0.319	0.354	0.185	0.019	0.948	0.000	0.476	0.026	0.014
1345	225.	0.144	0.147	0.031	0.315	0.343	******	******	******	******	******	******	******
1400	240.	0.166	0.166	0.028	0.313	0.339	0.172	0.015	0.901	0.0	0.458	0.024	0.013
1415	255.	0.178	0.183	0.026	0.291	0.315	******	******	******	******	******	******	******
1430	270.	0.195	0.198	0.022	0.279	0.299	0.168	0.013	******	0.0	0.446	0.024	0.012
1445	285.	0.217	0.217	0.021	0.268	0.286	******	******	******	******	******	******	******
1500	300.	0.234	0.234	0.022	0.251	0.273	0.156	0.010	0.884	0.0	0.430	0.023	0.011
1515	315.	0.249	0.254	0.017	0.238	0.254	******	******	******	******	******	******	******
1530	330.	0.269	0.271	0.017	0.221	0.237	0.145	0.008	0.871	0.0	0.415	0.023	0.010
1545	345.	0.283	0.288	0.015	0.212	0.226	******	******	******	******	******	******	******
1600	360.	0.305	0.305	0.016	0.197	0.212	0.139	0.006	0.842	0.0	0.401	0.022	0.009

EC -232
7-HYDROCARBON MIX #1
1977 AUG 11

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM 3-PART	PROPALD PPM 3-PART	ACETONE PPM	MEK PPM	C3-N-2 PPM C-600	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
1000	0.	1.74	0.000	0.009	0.002	0.0	0.001	0.0	0.0	0.0	0.0
1015	15.	******	******	******	******	******	******	******	******	******	******
1030	30.	1.69	0.001	******	******	******	0.013	0.0034	0.0003	0.0003	0.0003
1045	45.	******	******	******	******	******	******	******	******	******	******
1100	60.	1.74	0.001	0.052	0.030	0.0015	0.018	0.0056	0.0005	0.0007	0.0008
1115	75.	******	******	******	******	******	******	******	******	******	******
1130	90.	1.75	0.002	******	0.055	0.0012	******	0.0141	0.0008	0.0011	0.0012
1145	105.	******	******	******	******	******	******	******	******	******	******
1200	120.	1.75	0.005	0.032	0.069	0.0016	0.053	0.0135	******	0.0016	0.0022
1215	135.	******	******	******	******	******	******	******	******	******	******
1230	150.	1.79	******	******	******	******	0.069	0.0205	******	0.0020	******
1245	165.	******	******	******	******	******	******	******	******	******	******
1300	180.	1.80	0.013	******	0.086	0.0021	0.072	0.0199	0.0018	0.0023	0.0030
1315	195.	******	******	******	******	******	******	******	******	******	******
1330	210.	1.86	0.018	******	0.085	0.0023	0.113	0.0295	0.0021	0.0025	0.0034
1345	225.	******	******	******	******	******	******	******	******	******	******
1400	240.	1.87	0.022	0.110	******	******	0.090	0.0164	0.0025	0.0028	0.0038
1415	255.	******	******	******	******	******	******	******	******	******	******
1430	270.	1.94	0.027	******	0.094	0.0030	0.142	0.0374	0.0028	0.0029	0.0048
1445	285.	******	******	******	******	******	******	******	******	******	******
1500	300.	1.95	0.032	0.157	0.102	0.0035	0.126	0.0252	0.0030	0.0035	0.0051
1515	315.	******	******	******	******	******	******	******	******	******	******
1530	330.	2.17	0.038	******	0.100	0.0040	0.153	0.0417	0.0032	0.0035	0.0059
1545	345.	******	******	******	******	******	******	******	******	******	******
1600	360.	2.01	0.040	0.136	0.095	0.0052	0.161	0.0368	0.0033	0.0039	0.0054

EC -232
7-HYDROCARBON MIX #1
1977 AUG 11

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1000	0.	82.6	49.5	15.88	******	30.00
1015	15.	85.2	50.5	15.99	0.230	******
1030	30.	85.7	51.5	15.71	0.225	******
1045	45.	86.0	52.0	16.20	0.227	******
1100	60.	85.7	52.0	15.99	0.227	20.00
1115	75.	85.5	53.0	******	******	******
1130	90.	86.0	54.0	******	******	******
1145	105.	86.0	54.0	******	******	******
1200	120.	85.5	54.0	16.46	0.239	20.00
1215	135.	85.5	54.5	******	0.227	******
1230	150.	86.0	54.5	16.34	0.230	******
1245	165.	85.5	54.5	******	0.227	******
1300	180.	85.7	55.0	16.38	0.230	20.00
1315	195.	86.2	54.5	******	******	******
1330	210.	85.0	55.0	******	******	******
1345	225.	85.5	55.5	******	******	******
1400	240.	84.8	55.5	20.25	0.227	15.00
1415	255.	85.2	55.5	******	******	******
1430	270.	84.8	55.5	******	******	******
1445	285.	85.2	56.0	******	******	******
1500	300.	85.2	55.5	16.07	0.232	20.00
1515	315.	85.0	56.0	******	******	******
1530	330.	85.5	56.0	******	******	******
1545	345.	84.8	56.0	******	0.237	******
1600	360.	85.2	56.0	******	0.234	20.00

EC -233
7-HYDROCARBON MIX #2
1977 AUG 12

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER
PEAKS ATRRIBUTED TO C6-N-O OBSERVED ON PANALYZER. DATA NOT QUANTIFIABLE.
C3-N-2 INCLUDES SMALL AMCUNTS OF C2-N
ACETALDEHYDE AND PROPIONALDEHYDE MONITORED ON 3-PART COLUMN
OZONE MONITORED BY BOTH DASIBI 1212 (D-1212) AND DASIBI 1070 (D-1070)
BRADY 1663 (1977 AUG 26 CALIB); TECO 148; BECKMAN 6800
FACTORS: CO 1.6/0.336

T=0 AT 1015 PDT

	CALIB#
HCHO	1
PAN	9
REL INT	4

TS	DEG K	AVERAGE	302.7
REL HUM	%	AVERAGE	52.70
SSPOWER	KW	AVERAGE	16.56
RADIOM	MW/CM2	AVERAGE	0.232
H2O	PPM	AVERAGE	2.138E 04
NO	PPM	INIT COND	0.096
NO2-CORR	PPM	INIT COND	0.007
ETHENE	PPM	INIT COND	0.260
PROPENE	PPM	INIT COND	0.051
N-C4	PPM	INIT COND	1.085
T2-C4=	PPM	INIT COND	0.025
2,3-DMB	PPM	INIT COND	0.648
TOLUENE	PPM	INIT COND	0.034
M-XYL	PPM	INIT COND	0.033
CO	PPM	INIT COND	1.299
HCHO	PPM	INIT COND	0.004
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -233
7-HYDROCARBON MIX #2
1977 AUG 12

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.096
430.	1.905
403.	1.716
380.	1.440
370.	1.316
360.	1.165
350.	1.000
340.	0.791
330.	0.584
320.	0.323
310.	0.127
300.	0.024
290.	0.000
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 2.267 L/MIN

42 GC SAMPLES TAKEN

EC -233
7-HYDROCARBON MIX #2
1977 AUG 12

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM D-1212	OZONE PPM D-1070	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
1015	0.	0.0	0.0	0.096	0.007	0.103	0.260	0.051	1.085	0.025	0.648	0.034	0.033
1030	15.	0.002	0.002	0.056	0.043	0.099	******	******	******	******	******	******	******
1045	30.	0.034	0.039	0.022	0.074	0.096	0.242	0.044	1.062	0.017	0.623	0.033	0.031
1100	45.	0.095	0.093	0.013	0.076	0.089	******	******	******	******	******	******	******
1115	60.	0.156	0.159	0.011	0.071	0.081	0.225	0.035	1.032	0.003	0.594	0.031	0.026
1130	75.	0.198	0.203	0.009	0.063	0.072	******	******	******	******	******	******	******
1145	90.	0.230	0.232	0.009	0.054	0.062	0.194	0.027	1.008	0.0	0.569	0.030	******
1200	105.	0.252	0.256	0.008	0.051	0.059	******	******	******	******	******	******	******
1215	120.	0.271	0.278	0.008	0.047	0.055	0.201	0.020	0.973	0.0	0.548	0.029	0.021
1230	135.	0.286	0.291	0.007	0.043	0.051	******	******	******	******	******	******	******
1245	150.	0.300	0.303	0.007	0.040	0.047	0.189	0.016	******	0.0	0.531	0.026	0.019
1300	165.	0.310	0.313	0.007	0.037	0.044	******	******	******	******	******	******	******
1315	180.	0.318	0.318	0.007	0.035	0.042	0.177	0.012	0.931	0.0	0.514	0.026	0.018
1330	195.	0.320	0.322	0.007	0.033	0.039	******	******	******	******	******	******	******
1345	210.	0.325	0.325	0.006	0.030	0.036	0.166	0.010	0.913	060	0.501	0.027	0.016
1400	225.	0.325	0.327	0.007	0.029	0.036	******	******	******	******	******	******	******
1415	240.	0.327	0.330	0.007	0.029	0.036	0.158	0.007	0.899	0.0	0.493	0.026	0.016
1430	255.	0.327	0.327	0.007	0.029	0.036	******	******	******	******	******	******	******
1445	270.	0.327	0.327	0.007	0.029	0.036	0.152	0.006	0.880	0.0	0.477	0.024	0.014
1500	285.	0.327	0.330	0.007	0.027	0.034	******	******	******	******	******	******	******
1515	300.	0.325	0.327	0.006	0.027	0.034	0.142	0.005	0.887	0.0	0.472	0.025	0.014
1530	315.	0.325	0.325	0.007	0.029	0.035	******	******	******	******	******	******	******
1545	330.	0.325	0.325	0.008	0.028	0.036	0.136	0.004	0.864	0.0	0.452	******	0.013
1600	345.	0.325	0.325	0.007	0.029	0.035	******	******	******	******	******	******	******
1615	360.	0.322	0.325	0.006	0.030	0.036	0.129	0.003	0.849	0.0	0.446	0.024	0.012

EC -233
7-HYDROCARBON MIX #2
1977 AUG 12

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM 3-PART	PROPALD PPM 3-PART	ACETONE PPM	MEK PPM	C3-N-2 PPM C-600	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
1015	0.	1.30	******	0.604	0.001	0.0003	0.001	0.0	******	0.0	0.0
1030	15.	******	******	******	******	******	******	******	******	******	******
1045	30.	1.31	0.001	******	******	******	0.023	0.0054	0.0002	0.0006	0.0004
1100	45.	******	******	******	******	******	******	******	******	******	******
1115	60.	1.13	0.006	0.059	0.071	0.0022	0.054	0.0134	0.0009	0.0012	0.0015
1130	75.	******	******	******	******	******	******	******	******	******	******
1145	90.	1.37	0.018	******	0.077	0.0033	0.079	0.0191	0.0014	0.0016	0.0022
1200	105.	******	******	******	******	******	******	******	******	******	******
1215	120.	1.38	0.022	0.105	******	******	0.080	0.0210	0.0016	0.0020	0.0026
1230	135.	******	******	******	******	******	******	******	******	******	******
1245	150.	1.39	0.026	******	0.083	0.0040	0.106	0.0257	0.0018	0.0021	0.0029
1300	165.	******	******	******	******	******	******	******	******	******	******
1315	180.	1.45	0.029	0.121	******	******	0.094	0.0212	0.0022	0.0023	0.0036
1330	195.	******	******	******	******	******	******	******	******	******	******
1345	210.	1.52	0.033	******	0.078	0.0044	0.123	0.0306	0.0023	0.0024	0.0037
1400	225.	******	******	******	******	******	******	******	******	******	******
1415	240.	1.56	0.033	0.125	******	******	0.127	0.0310	0.0024	0.0025	0.0037
1430	255.	******	******	******	******	******	******	******	******	******	******
1445	270.	1.57	0.034	******	0.079	0.0043	0.102	0.0193	0.0025	0.0024	0.0037
1500	285.	******	******	******	******	******	******	******	******	******	******
1515	300.	1.55	0.037	0.145	******	******	0.151	0.0377	0.0025	0.0027	0.0038
1530	315.	******	******	******	******	******	******	******	******	******	******
1545	330.	1.62	0.035	******	0.083	0.0049	0.125	0.0293	0.0024	0.0027	0.0039
1600	345.	******	******	******	******	******	******	******	******	******	******
1615	360.	1.55	0.036	0.145	0.116	0.0056	0.174	0.0428	0.0025	0.0029	0.0039

EC -233
7-HYDROCARBON MIX #2
1977 AUG 12

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1015	0.	84.5	51.0	16.52	0.227	30.00
1030	15.	86.0	50.5	******	0.232	******
1045	30.	85.0	51.0	16.52	0.232	******
1100	45.	85.5	52.0	******	******	******
1115	60.	85.7	52.0	16.60	0.232	20.00
1130	75.	86.0	52.5	******	******	******
1145	90.	86.2	52.5	16.51	******	******
1200	105.	86.0	52.5	******	******	******
1215	120.	86.0	52.5	16.46	0.227	20.00
1230	135.	84.8	53.0	******	******	******
1245	150.	85.5	53.5	16.55	******	******
1300	165.	84.3	53.5	16.59	0.232	******
1315	180.	84.5	54.5	16.23	0.225	20.00
1330	195.	85.0	54.5	******	******	******
1345	210.	84.3	54.5	16.72	******	******
1400	225.	84.0	55.0	******	******	******
1415	240.	84.3	55.0	16.47	0.227	20.00
1430	255.	84.5	54.5	******	******	******
1445	270.	84.3	54.0	******	******	******
1500	285.	84.5	54.0	******	******	******
1515	300.	84.5	54.0	16.72	0.230	20.00
1530	315.	85.0	53.5	******	******	******
1545	330.	84.8	53.5	******	******	******
1600	345.	85.2	53.5	******	******	******
1615	360.	84.8	53.5	16.80	0.234	20.00

EC -237
7-HYDROCARBON MIX #4
1977 OCT 28

BEGIN IRRADIATION 0930: 0.25 INCH PYREX FILTER: TRICHROIC FILTER OUT
PEAKS ATTRIBUTED TO C6-N-D OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
PROPIONALDEHYDE FACTOR ESTIMATED
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
DASIBI 1212, TECO 148, BECKMAN 6800 USED
BRADY 291 USED
CO FACTOR 1.6/2.93

T=0 AT 930 PDT

	CALIB#
HCHO	2
PAN	9
REL INT	4

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	56.04
SSPOWER	KW	AVERAGE	18.32
RADIOM	MW/CM2	AVERAGE	0.228
H2O	PPM	AVERAGE	2.348E 04
NO	PPM	INIT COND	0.377
NO2-CORR	PPM	INIT COND	0.106
ETHENE	PPM	INIT COND	0.875
PROPENE	PPM	INIT COND	0.100
N-C4	PPM	INIT COND	1.025
T2-C4=	PPM	INIT COND	0.050
2,3-DMB	PPM	INIT COND	0.463
TOLUENE	PPM	INIT COND	0.086
M-XYL	PPM	INIT COND	0.091
CO	PPM	INIT COND	0.956
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

EC -237
7-HYDROCARBON MIX #4
1977 OCT 28

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

WAVELENGTH(NM)	REL. INTENSITY
500.	2.879
430.	2.240
403.	1.886
380.	1.581
370.	1.384
360.	1.156
350.	1.000
340.	0.781
330.	0.538
320.	0.300
310.	0.116
300.	0.018
290.	0.001
280.	0.001
270.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.692 L/MIN

49 GC SAMPLES TAKEN

EC -237
7-HYDROCARBON MIX #4
1977 OCT 28

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
930	0.	0.000	0.377	0.106	0.483	0.875	0.100	1.025	0.050	0.463	0.086	0.091
945	15.	0.000	0.272	0.199	0.470	******	******	******	******	******	******	******
1000	30.	0.007	0.169	0.293	0.462	0.928	0.081	0.975	0.031	0.441	0.081	0.076
1015	45.	0.039	0.083	0.356	0.437	******	******	******	******	******	******	******
1030	60.	0.108	0.040	0.373	0.413	0.874	0.066	0.936	0.011	0.422	0.078	0.066
1045	75.	0.186	0.024	0.357	0.380	******	******	******	******	******	******	******
1100	90.	0.261	0.018	0.331	0.347	0.786	0.047	0.916	0.001	0.399	0.073	0.055
1115	105.	0.332	0.013	0.305	0.318	******	******	******	******	******	******	******
1130	120.	0.388	0.011	0.277	0.286	0.732	0.034	0.915	0.000	0.381	0.071	0.049
1145	135.	0.449	0.010	0.244	0.251	******	******	******	******	******	******	******
1200	150.	0.508	0.007	0.216	0.223	0.659	0.021	0.872	0.0	0.365	0.068	0.042
1215	165.	0.555	0.007	0.183	0.187	******	******	******	******	******	******	******
1230	180.	0.591	0.006	0.154	0.159	0.609	0.015	0.903	0.0	0.359	0.065	0.036
1245	195.	0.618	0.006	0.130	0.135	******	******	******	******	******	******	******
1300	210.	0.638	0.006	0.110	0.115	0.542	0.009	0.854	0.0	0.341	0.062	0.031
1315	225.	0.647	0.020	0.083	0.103	******	******	******	******	******	******	******
1330	240.	0.652	0.006	0.086	0.091	0.490	0.005	0.837	0.0	0.322	0.061	0.029
1345	255.	0.647	0.006	0.082	0.086	******	******	******	******	******	******	******
1400	270.	0.642	0.005	0.078	0.083	0.449	0.003	0.824	0.0	0.314	0.058	0.026
1415	285.	0.633	0.005	0.065	0.069	******	******	******	******	******	******	******
1430	300.	0.625	0.005	0.055	0.059	0.418	0.002	0.812	0.0	0.307	0.057	0.024
1445	315.	0.611	0.005	0.054	0.057	******	******	******	******	******	******	******
1500	330.	0.601	0.005	0.052	0.057	0.380	0.002	0.797	0.0	0.300	0.055	0.022
1515	345.	0.591	0.005	0.052	0.054	******	******	******	******	******	******	******
1530	360.	0.581	0.005	0.050	0.054	0.352	0.001	0.779	0.0	0.292	0.053	0.021

EC -237
7-HYDROCARBON MIX #4
1977 OCT 28

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
930	0.	0.96	0.000	0.0	0.001	0.0002	0.003	******	0.0	0.0
945	15.	0.96	******	******	******	******	******	******	******	******
1000	30.	0.98	0.001	******	0.043	0.0001	0.024	0.0061	0.0006	0.0005
1015	45.	0.99	******	******	******	******	******	******	******	******
1030	60.	1.01	0.012	0.107	0.084	0.0009	0.056	0.0134	0.0013	0.0016
1045	75.	1.04	******	******	******	******	******	******	******	******
1100	90.	1.10	0.027	******	0.086	0.0016	0.071	0.0163	0.0016	0.0024
1115	105.	1.09	******	******	******	******	******	******	******	******
1130	120.	1.15	0.042	0.228	0.097	0.0026	******	0.0272	0.0021	0.0032
1145	135.	1.20	******	******	******	******	******	******	******	******
1200	150.	1.21	0.055	******	0.104	0.0034	0.149	0.0334	0.0024	0.0033
1215	165.	1.27	******	******	******	******	******	******	******	******
1230	180.	1.31	0.068	0.335	0.115	0.0041	0.193	0.0404	0.0025	0.0043
1245	195.	1.34	******	******	******	******	******	******	******	******
1300	210.	1.39	0.079	******	0.108	0.0044	0.199	0.0400	0.0027	0.0052
1315	225.	1.42	******	******	******	******	******	******	******	******
1330	240.	1.46	0.086	0.384	0.114	0.0044	0.197	0.0468	0.0028	0.0054
1345	255.	1.47	******	******	******	******	******	******	******	******
1400	270.	1.53	0.083	******	0.100	0.0042	0.198	0.0485	0.0029	0.0054
1415	285.	1.55	******	******	******	******	******	******	******	******
1430	300.	1.58	0.100	0.387	0.110	0.0047	0.221	0.0526	0.0030	0.0054
1445	315.	1.62	******	******	******	******	******	******	******	******
1500	330.	1.66	0.098	******	0.098	0.0042	0.195	0.0491	0.0032	0.0055
1515	345.	1.69	******	******	******	******	******	******	******	******
1530	360.	1.73	0.098	0.282	0.104	0.0044	0.197	0.0507	0.0033	0.0059

EC -237
7-HYDROCARBON MIX #4
1977 OCT 28

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
930	0.	84.0	49.0	18.10	******	20.00
945	15.	84.5	51.0	******	0.225	******
1000	30.	84.5	53.5	******	******	******
1015	45.	84.8	55.5	******	******	******
1030	60.	85.7	56.5	18.30	0.227	20.00
1045	75.	86.2	57.0	******	******	******
1100	90.	86.5	57.5	******	******	******
1115	105.	86.5	58.0	******	******	******
1130	120.	87.0	58.0	18.30	0.232	20.00
1145	135.	86.5	58.0	******	0.225	******
1200	150.	87.0	58.0	******	******	******
1215	165.	86.5	58.0	******	******	******
1230	180.	86.5	59.0	18.60	0.230	20.00
1245	195.	87.0	59.0	******	******	******
1300	210.	86.7	59.0	******	******	******
1315	225.	86.2	59.0	******	******	******
1330	240.	86.2	59.0	18.30	0.225	20.00
1345	255.	86.7	59.0	******	******	******
1400	270.	86.5	59.0	******	******	******
1415	285.	86.5	59.0	******	******	******
1430	300.	86.5	59.0	******	******	20.00
1445	315.	86.5	59.0	******	0.225	******
1500	330.	86.2	59.0	******	******	******
1515	345.	86.5	59.0	******	******	******
1530	360.	86.5	59.0	18.30	0.225	15.00

EC -237
T-HYDROCARBON MIX #4
1977 OCT 28

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT NO3 PPM	TOT N PPM	H2O PPM	HCTOT PPMC
930	0.	0.106	0.484	0.000	0.484	19250.	10.472
945	15.	0.200	0.471	0.001	0.473	20352.	10.332
1000	30.	0.296	0.464	0.002	0.464	21350.	10.192
1015	45.	0.365	0.446	0.009	0.448	22322.	10.035
1030	60.	0.388	0.427	0.015	0.429	23445.	9.877
1045	75.	0.380	0.403	0.023	0.404	24024.	9.646
1100	90.	0.363	0.379	0.031	0.381	24423.	9.415
1115	105.	0.344	0.358	0.039	0.358	24636.	9.397
1130	120.	0.325	0.333	0.048	0.336	25021.	9.378
1145	135.	0.298	0.305	0.054	0.308	24636.	9.231
1200	150.	0.276	0.283	0.060	0.283	25021.	9.084
1215	165.	0.250	0.255	0.068	0.258	24636.	9.166
1230	180.	0.230	0.234	0.075	0.236	25060.	9.248
1245	195.	0.211	0.216	0.081	0.217	25423.	9.020
1300	210.	0.197	0.202	0.086	0.203	25256.	8.792
1315	225.	0.173	0.193	0.090	0.193	24867.	8.665
1330	240.	0.181	0.186	0.094	0.187	24867.	8.539
1345	255.	0.175	0.178	0.093	0.181	25256.	8.414
1400	270.	0.169	0.173	0.091	0.173	25060.	8.289
1415	285.	0.165	0.169	0.100	0.170	25060.	8.269
1430	300.	0.164	0.167	0.109	0.169	25060.	8.249
1445	315.	0.161	0.165	0.108	0.166	25060.	8.057
1500	330.	0.159	0.164	0.107	0.164	24867.	7.864
1515	345.	0.159	0.161	0.107	0.164	25060.	7.753
1530	360.	0.158	0.161	0.107	0.162	25060.	7.641

EC -238
7-HYDROCARBON MIX #3
1977 OCT 31

BEGIN IRRADIATION 0900; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
PEAKS ATTRIBUTED TO C6-N-D OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
PROPIONALDEHYDE FACTOR ESTIMATED
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
DASIBI 1212; TECO 148; BECKMAN 6800 USED
BRADY 291 USED
FACTORS: CO 1.6/3.21

T=0 AT 900 PST

	CALIB#
HCHO	2
PAN	9
REL INT	4

TS	DEG K	AVERAGE	303.6
REL HUM	%	AVERAGE	59.69
SSPOWER	KW	AVERAGE	18.90
RADIOM	MW/CM2	AVERAGE	0.233
H2O	PPM	AVERAGE	2.547E 04
NO	PPM	INIT COND	0.718
NO2-CORR	PPM	INIT COND	0.234
ETHENE	PPM	INIT COND	0.982
PROPENE	PPM	INIT COND	0.093
N-C4	PPM	INIT COND	0.966
T2-C4=	PPM	INIT COND	0.047
2,3-DMB	PPM	INIT COND	0.420
TOLUENE	PPM	INIT COND	0.083
M-XYL	PPM	INIT COND	0.084
CO	PPM	INIT COND	0.677
HCHO	PPM	INIT COND	0.026
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.004

* ASSIGNED INITIAL CONDITION

EC -238
7-HYDROCARBON MIX #3
1977 OCT 31

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.267
430.	2.380
403.	1.970
380.	1.646
370.	1.428
360.	1.172
350.	1.000
340.	0.775
330.	0.527
320.	0.293
310.	0.111
300.	0.017
290.	0.000
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.621 L/MIN

79 GC SAMPLES TAKEN

EC -238
7-HYDROCARBON MIX #3
1977 OCT 31

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
900	0.	0.000	0.718	0.234	0.952	0.982	0.093	0.966	0.047	0.420	0.083	0.084
915	15.	0.000	0.633	0.297	0.927	******	******	******	******	******	******	******
930	30.	0.000	0.545	0.379	0.921	0.949	0.082	0.954	0.033	0.401	0.078	0.074
945	45.	0.000	0.440	0.465	0.907	******	******	******	******	******	******	******
1000	60.	0.000	0.357	0.534	0.888	0.911	0.070	0.935	0.020	0.392	0.075	0.065
1015	75.	0.007	0.281	0.585	0.864	******	******	******	******	******	******	******
1030	90.	0.015	0.217	0.627	0.842	0.852	0.060	0.921	0.011	0.383	0.073	0.059
1045	105.	0.024	0.166	0.654	0.818	******	******	******	******	******	******	******
1100	120.	0.042	0.122	0.669	0.792	0.814	0.053	0.927	0.005	0.369	0.070	0.052
1115	135.	0.076	0.098	0.668	0.763	******	******	******	******	******	******	******
1130	150.	0.103	0.073	0.664	0.735	0.774	0.044	0.900	0.001	0.355	0.069	0.047
1145	165.	0.132	0.061	0.649	0.706	******	******	******	******	******	******	******
1200	180.	0.169	0.046	0.637	0.679	0.725	0.035	0.875	0.000	0.341	0.067	0.043
1215	195.	0.205	0.037	0.609	0.645	******	******	******	******	******	******	******
1230	210.	0.239	0.034	0.582	0.614	0.665	0.027	0.863	0.0	0.331	0.064	******
1245	225.	0.269	0.024	0.556	0.578	******	******	******	******	******	******	******
1300	240.	0.305	0.024	0.518	0.543	0.627	0.020	0.843	0.0	0.318	0.062	0.035
1315	255.	0.342	0.022	0.480	0.499	******	******	******	******	******	******	******
1330	270.	0.379	0.020	0.441	0.453	0.576	0.015	0.835	0.0	0.310	0.058	0.030
1345	285.	0.415	0.015	0.402	0.416	******	******	******	******	******	******	******
1400	300.	0.457	0.015	0.362	0.372	0.542	0.010	0.798	0.0	0.293	0.057	0.027
1415	315.	0.493	0.012	0.320	0.330	******	******	******	******	******	******	******
1430	330.	0.530	0.010	0.284	0.291	0.486	0.006	0.764	0.0	0.277	0.054	0.023
1445	345.	0.569	0.012	0.243	0.250	******	******	******	******	******	******	******
1500	360.	0.603	0.010	0.210	0.217	0.433	0.004	0.769	0.0	0.269	0.053	0.020
1515	375.	0.635	0.010	0.177	0.185	******	******	******	******	******	******	******
1530	390.	0.660	0.010	0.147	0.154	0.389	0.002	0.736	0.0	0.257	0.050	0.017
1545	405.	0.677	0.010	0.127	0.132	******	******	******	******	******	******	******
1600	420.	0.686	0.010	0.108	0.115	0.354	0.002	0.725	0.0	0.243	0.048	0.016
1615	435.	0.691	0.010	0.095	0.102	******	******	******	******	******	******	******
1630	450.	0.689	0.010	0.086	0.094	0.321	******	******	******	******	******	******
1645	465.	0.686	0.007	0.081	0.086	******	******	******	******	******	******	******
1700	480.	0.682	0.007	0.075	0.083	0.298	0.001	0.683	0.0	0.229	0.045	0.013
1715	495.	0.672	0.010	0.069	0.073	******	******	******	******	******	******	******

EC -238
7-HYDROCARBON MIX #3
1977 OCT 31

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
900	0.	0.68	0.000	0.026	0.001	0.0002	0.004	0.0002	0.0	0.0	0.0
915	15.	1.53	******	******	******	******	******	******	******	******	******
930	30.	1.56	0.001	******	0.038	0.0002	0.018	0.0047	0.0	0.0004	0.0005
945	45.	1.59	******	******	******	******	******	******	******	******	******
1000	60.	1.61	0.004	0.054	0.075	0.0004	0.035	0.0104	0.0003	0.0010	0.0013
1015	75.	1.60	******	******	******	******	******	******	******	******	******
1030	90.	1.62	0.008	******	0.099	0.0005	0.054	0.0160	0.0003	0.0009	0.0016
1045	105.	1.66	******	******	******	******	******	******	******	******	******
1100	120.	1.67	0.014	******	0.107	0.0006	0.071	0.0204	0.0009	0.0017	0.0024
1115	135.	1.67	******	******	******	******	******	******	******	******	******
1130	150.	1.72	0.022	******	0.111	0.0014	0.095	0.0268	0.0009	0.0019	0.0028
1145	165.	1.71	******	******	******	******	******	******	******	******	******
1200	180.	1.78	0.030	0.209	0.128	0.0021	0.120	0.0324	0.0012	0.0023	0.0037
1215	195.	1.79	******	******	******	******	******	******	******	******	******
1230	210.	1.83	0.038	******	0.118	0.0025	0.132	0.0344	0.0015	0.0026	0.0037
1245	225.	1.86	******	******	******	******	******	******	******	******	******
1300	240.	1.90	0.045	0.292	0.128	0.0030	0.156	0.0412	0.0018	0.0028	0.0042
1315	255.	1.91	******	******	******	******	******	******	******	******	******
1330	270.	1.97	0.058	******	0.101	0.0033	0.170	0.0414	0.0015	0.0030	0.0050
1345	285.	1.99	******	******	******	******	******	******	******	******	******
1400	300.	2.02	0.068	0.382	0.110	0.0038	0.192	0.0515	0.0013	0.0032	0.0055
1415	315.	2.05	******	******	******	******	******	******	******	******	******
1430	330.	2.07	0.073	******	0.114	0.0042	0.194	0.0500	0.0013	0.0033	0.0055
1445	345.	2.14	******	******	******	******	******	******	******	******	******
1500	360.	2.15	0.084	0.404	0.114	0.0049	0.233	0.0610	0.0014	0.0035	0.0065
1515	375.	2.20	******	******	******	******	******	******	******	******	******
1530	390.	2.25	0.100	******	0.106	0.0055	0.263	0.0595	0.0013	0.0039	0.0067
1545	405.	2.27	******	******	******	******	******	******	******	******	******
1600	420.	2.33	0.109	******	0.108	0.0056	0.258	0.0696	0.0014	0.0040	0.0076
1615	435.	2.35	******	******	******	******	******	******	******	******	******
1630	450.	2.35	0.110	******	******	******	******	******	0.0015	0.0042	0.0076
1645	465.	2.42	******	******	******	******	******	******	******	******	******
1700	480.	2.43	0.112	0.302	0.086	0.0051	0.254	0.0709	0.0014	0.0040	0.0075
1715	495.	2.43	0.113	******	******	******	******	******	0.0016	0.0043	0.0076

EC -238
7-HYDROCARBON MIX #3
1977 OCT 31

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
900	0.	86.0	50.0	18.70	0.234	20.00
915	15.	85.0	51.5	18.40	******	******
930	30.	84.8	54.5	******	******	******
945	45.	86.2	56.5	******	******	******
1000	60.	86.7	57.0	******	******	20.00
1015	75.	86.5	57.5	******	******	******
1030	90.	87.0	58.0	******	******	******
1045	105.	86.7	58.5	******	******	******
1100	120.	87.2	59.0	18.10	0.215	******
1115	135.	87.9	59.0	******	0.237	******
1130	150.	87.9	59.0	******	******	******
1145	165.	88.2	59.0	******	******	******
1200	180.	88.2	59.0	19.10	0.234	20.00
1215	195.	88.2	59.5	******	******	******
1230	210.	87.9	59.5	******	******	******
1245	225.	87.9	59.5	******	******	******
1300	240.	87.4	59.5	18.90	0.230	20.00
1315	255.	87.2	60.0	******	******	******
1330	270.	86.7	60.5	******	******	******
1345	285.	86.5	61.0	******	******	******
1400	300.	86.7	61.5	19.20	0.230	20.00
1415	315.	86.7	62.0	******	******	******
1430	330.	87.0	62.0	******	******	******
1445	345.	86.7	62.0	******	0.230	******
1500	360.	86.5	62.0	19.10	0.234	20.00
1515	375.	87.0	62.0	******	******	******
1530	390.	86.5	62.0	******	******	******
1545	405.	86.5	62.0	******	******	******
1600	420.	86.5	62.0	******	0.234	******
1615	435.	86.5	62.0	19.20	0.234	******
1630	450.	86.2	62.0	******	******	******
1645	465.	86.5	62.0	******	******	******
1700	480.	87.0	62.0	19.40	0.239	20.00
1715	495.	86.5	62.0	******	******	******

EC -238
7-HYDROCARBON MIX #3
1977 OCT 31

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT NO3 PPM	TOT N PPM	H2O PPM	HCTOT PPMC
900	0.	0.234	0.953	0.000	0.953	20910.	10.112
915	15.	0.298	0.928	0.001	0.931	20876.	9.971
930	30.	0.381	0.923	0.002	0.926	21920.	9.830
945	45.	0.469	0.911	0.004	0.909	23813.	9.722
1000	60.	0.540	0.894	0.006	0.896	24400.	9.614
1015	75.	0.594	0.872	0.008	0.874	24423.	9.522
1030	90.	0.638	0.852	0.011	0.855	25021.	9.429
1045	105.	0.669	0.833	0.015	0.835	25042.	9.374
1100	120.	0.689	0.811	0.019	0.811	25651.	9.319
1115	135.	0.691	0.767	0.023	0.789	26253.	9.223
1130	150.	0.691	0.762	0.027	0.765	26253.	9.127
1145	165.	0.681	0.738	0.032	0.743	26457.	9.045
1200	180.	0.674	0.716	0.037	0.721	26457.	8.962
1215	195.	0.650	0.686	0.041	0.686	26681.	8.845
1230	210.	0.628	0.660	0.045	0.662	26476.	8.729
1245	225.	0.606	0.628	0.049	0.630	26476.	8.671
1300	240.	0.572	0.596	0.053	0.596	26069.	8.613
1315	255.	0.540	0.559	0.060	0.562	26086.	8.515
1330	270.	0.508	0.520	0.067	0.528	25898.	8.418
1345	285.	0.474	0.489	0.072	0.489	25910.	8.329
1400	300.	0.440	0.449	0.078	0.454	26326.	8.241
1415	315.	0.401	0.410	0.080	0.413	26540.	8.054
1430	330.	0.366	0.374	0.083	0.376	26747.	7.867
1445	345.	0.332	0.340	0.089	0.344	26540.	7.880
1500	360.	0.305	0.313	0.095	0.315	26335.	7.894
1515	375.	0.281	0.288	0.104	0.291	26747.	7.764
1530	390.	0.259	0.266	0.112	0.269	26335.	7.633
1545	405.	0.244	0.249	0.117	0.254	26335.	7.533
1600	420.	0.230	0.237	0.122	0.239	26335.	7.432
1615	435.	0.217	0.225	0.123	0.227	26335.	7.299
1630	450.	0.210	0.217	0.124	0.220	26131.	7.167
1645	465.	0.205	0.210	0.124	0.213	26335.	7.044
1700	480.	0.200	0.208	0.125	0.208	26747.	6.922
1715	495.	0.195	0.200	0.127	0.205	26335.	6.925

EC -241
7-HYDROCARBON MIX #5
1977 NOV 4

BEGIN IRRADIATION 0845; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
PEAKS ATTRIBUTED TO C6-N-D OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
DASIBI 1212, TECO 148, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/0.264

T=0 AT 845 PST

	CALIB#
PAN	9
HCHO	2
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	49.18
SSPOWER	KW	AVERAGE	18.91
RADIOM	MW/CM2	AVERAGE	0.226
H2O	PPM	AVERAGE	2.076E 04
NO	PPM	INIT COND	0.379
NO2-CORR	PPM	INIT COND	0.110
ETHENE	PPM	INIT COND	0.484
PROPENE	PPM	INIT COND	0.045
N-C4	PPM	INIT COND	0.404
T2-C4=	PPM	INIT COND	0.024
2,3-DMB	PPM	INIT COND	0.211
TOLUENE	PPM	INIT COND	0.040
M-XYL	PPM	INIT COND	0.044
CO	PPM	INIT COND	1.296
HCHO	PPM	INIT COND	0.018
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

EC -241
7-HYDROCARBON MIX #5
1977 NOV 4

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.969
430.	2.297
403.	1.932
380.	1.638
370.	1.396
360.	1.164
350.	1.000
340.	0.773
330.	0.524
320.	0.286
310.	0.103
300.	0.017
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.706 L/MIN

49 GC SAMPLES TAKEN

EC -241
7-HYDROCARBON MIX #5
1977 NOV 4

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
845	0.	0.000	0.379	0.110	0.489	0.484	0.045	0.464	0.024	0.211	0.040	0.044
900	15.	0.000	0.333	0.147	0.481	******	******	******	******	******	******	******
915	30.	0.000	0.292	0.182	0.473	0.455	0.042	0.472	0.017	0.203	0.039	0.039
930	45.	0.000	0.247	0.222	0.467	******	******	******	******	******	******	******
945	60.	0.002	0.200	0.257	0.456	0.433	0.035	0.448	0.011	0.197	0.037	0.034
1000	75.	0.010	0.161	0.288	0.446	******	******	******	******	******	******	******
1015	90.	0.017	0.120	0.318	0.436	0.391	0.030	0.435	0.006	0.188	0.035	0.030
1030	105.	0.029	0.093	0.335	0.427	******	******	******	******	******	******	******
1045	120.	0.044	0.072	0.341	0.412	0.396	0.027	0.452	0.003	0.184	0.035	0.027
1100	135.	0.064	0.055	0.346	0.400	******	******	******	******	******	******	******
1115	150.	0.086	0.046	0.340	0.387	0.362	0.021	0.423	0.001	0.177	0.033	0.024
1130	165.	0.103	0.040	0.334	0.373	******	******	******	******	******	******	******
1145	180.	0.125	0.034	0.332	0.365	0.349	0.019	0.432	0.000	0.173	0.032	0.022
1200	195.	0.147	0.031	0.325	0.355	******	******	******	******	******	******	******
1215	210.	0.173	0.023	0.314	0.337	0.327	0.013	0.400	0.0	0.166	0.031	0.019
1230	225.	0.195	0.022	0.302	0.322	******	******	******	******	******	******	******
1245	240.	0.217	0.017	0.292	0.309	0.309	0.012	0.412	0.0	0.160	0.030	0.018
1300	255.	0.239	0.018	0.274	0.291	******	******	******	******	******	******	******
1315	270.	0.264	0.015	0.259	0.273	0.294	0.008	0.389	0.0	0.154	0.027	0.014
1330	285.	0.291	0.013	0.249	0.260	******	******	******	******	******	******	******
1345	300.	0.310	0.011	0.234	0.245	0.269	0.007	0.398	0.0	0.149	0.028	0.014
1400	315.	0.335	0.012	0.228	0.236	******	******	******	******	******	******	******
1415	330.	0.362	0.011	0.211	0.220	0.249	0.004	0.369	0.0	0.142	0.027	0.012
1430	345.	0.386	0.010	0.191	0.197	******	******	******	******	******	******	******
1445	360.	0.408	0.010	0.171	0.178	0.230	0.003	0.364	0.0	0.133	0.025	0.010

EC -241
7-HYDROCARBON MIX #5
1977 NOV 4

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
845	0.	1.30	0.000	0.018	0.0010	0.0002	0.0023	0.0003	0.0	0.0
900	15.	1.28	******	******	******	******	******	******	******	******
915	30.	1.31	0.000	******	0.0155	0.0002	0.0095	0.0028	0.0001	0.0
930	45.	1.27	******	******	******	******	******	******	******	******
945	60.	1.33	0.002	0.034	0.0305	0.0003	0.0173	0.0055	0.0005	0.0009
1000	75.	1.36	******	******	******	******	******	******	******	******
1015	90.	1.36	0.004	******	0.0429	0.0005	0.0277	0.0091	0.0007	0.0011
1030	105.	1.38	******	******	******	******	******	******	******	******
1045	120.	1.40	0.008	0.046	0.0505	0.0007	0.0374	0.0120	0.0007	0.0011
1100	135.	1.41	******	******	******	******	******	******	******	******
1115	150.	1.43	0.012	******	0.0451	0.0009	0.0368	0.0121	0.0008	0.0013
1130	165.	1.49	******	******	******	******	******	******	******	******
1145	180.	1.49	0.016	0.097	0.0552	0.0014	******	0.0165	0.0009	0.0015
1200	195.	1.52	******	******	******	******	******	******	******	******
1215	210.	1.55	0.020	******	0.0565	0.0019	0.0609	0.0185	0.0010	0.0013
1230	225.	1.56	******	******	******	******	******	******	******	******
1245	240.	1.59	0.024	0.066	0.0586	0.0022	0.0698	0.0214	0.0013	0.0016
1300	255.	1.62	******	******	******	******	******	******	******	******
1315	270.	1.70	0.031	******	0.0486	0.0022	0.0591	0.0168	0.0016	0.0016
1330	285.	1.67	******	******	******	******	******	******	******	******
1345	300.	1.70	0.034	0.101	0.0603	0.0029	0.0837	0.0253	0.0016	0.0016
1400	315.	1.73	******	******	******	******	******	******	******	******
1415	330.	1.78	0.037	******	0.0623	0.0033	0.0878	0.0262	0.0015	0.0017
1430	345.	1.78	******	******	******	******	******	******	******	******
1445	360.	1.89	0.047	0.137	0.0542	0.0036	0.0910	0.0272	0.0016	0.0013

EC -241
7-HYDROCARBON MIX #5
1977 NOV 4

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
845	0.	85.2	42.0	18.40	0.225	20.00
900	15.	85.5	43.0	******	0.227	******
915	30.	84.8	46.0	******	0.225	******
930	45.	85.0	48.0	******	0.220	******
945	60.	85.5	49.0	18.80	0.220	20.00
1000	75.	85.7	49.5	******	******	******
1015	90.	86.0	50.0	******	******	******
1030	105.	85.7	50.5	******	******	******
1045	120.	86.2	50.5	19.00	0.232	20.00
1100	135.	86.2	50.5	******	0.225	******
1115	150.	86.2	51.0	******	0.225	******
1130	165.	86.2	51.0	******	******	******
1145	180.	87.0	51.0	19.10	0.222	20.00
1200	195.	86.7	51.0	******	******	******
1215	210.	86.5	51.0	******	******	******
1230	225.	87.2	51.0	******	******	******
1245	240.	87.0	51.0	18.90	0.227	20.00
1300	255.	87.0	51.0	******	0.227	******
1315	270.	86.7	50.5	******	******	******
1330	285.	86.5	51.0	******	******	******
1345	300.	87.2	51.0	19.10	0.227	20.00
1400	315.	87.2	51.0	******	******	******
1415	330.	86.7	51.0	******	******	******
1430	345.	87.0	51.0	******	******	******
1445	360.	87.0	51.0	19.10	0.230	20.00

EC -242
7-HYDROCARBON MIX #7
1977 NOV 7

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
PEAKS ATTRIBUTED TO C6-N-D OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
DASIBI 1212, TECO 14B, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/0.231

T=0 AT 945 PST

	CALIB#
HCHO	2
PAN	9
REL INT	4

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	59.09
SSPOWER	KW	AVERAGE	19.40
RADION	MW/CM2	AVERAGE	0.231
H2O	PPM	AVERAGE	2.475E 04
NO	PPM	INIT COND	0.377
NO2-CORR	PPM	INIT COND	0.125
ETHENE	PPM	INIT COND	2.014
PROPENE	PPM	INIT COND	0.109
N-C4	PPM	INIT COND	0.558
T2-C4=	PPM	INIT COND	0.108
2,3-DMB	PPM	INIT COND	0.203
TOLUENE	PPM	INIT COND	0.306
M-XYL	PPM	INIT COND	0.306
CO	PPM	INIT COND	1.021
HCHO	PPM	INIT COND	0.028
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.004

* ASSIGNED INITIAL CONDITION

EC -242
7-HYDROCARBON MIX #7
1977 NOV 7

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.965
430.	2.251
403.	1.869
380.	1.617
370.	1.401
360.	1.168
350.	1.000
340.	0.771
330.	0.530
320.	0.289
310.	0.111
300.	0.017
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.761 L/MIN

48 GC SAMPLES TAKEN

EC -242
7-HYDROCARBON MIX #7
1977 NOV 7

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DM8 PPM	TOLUENE PPM	M-XYL PPM
945	0.	0.000	0.377	0.125	0.503	2.014	0.109	0.558	0.108	0.203	0.306	0.306
1000	15.	0.005	0.177	0.298	0.475	******	******	******	******	******	******	******
1015	30.	0.176	0.027	0.401	0.428	1.831	0.084	0.545	0.037	0.191	0.268	0.250
1030	45.	0.413	0.012	0.326	0.337	******	******	******	******	******	******	******
1045	60.	0.547	0.011	0.250	0.261	1.640	0.051	0.526	0.000	0.178	0.266	0.193
1100	75.	0.633	0.010	0.177	0.185	******	******	******	******	******	******	******
1115	90.	0.672	0.010	0.122	0.133	1.456	0.030	0.514	0.000	0.171	0.258	0.170
1130	105.	0.682	0.010	0.095	0.103	******	******	******	******	******	******	******
1145	120.	0.672	0.010	0.090	0.098	1.325	0.018	0.498	0.000	0.165	0.249	0.151
1200	135.	0.647	0.010	0.065	0.072	******	******	******	******	******	******	******
1215	150.	0.623	0.009	0.061	0.068	1.234	0.012	0.495	0.000	0.161	0.244	0.142
1230	165.	0.594	0.010	0.047	0.056	******	******	******	******	******	******	******
1245	180.	0.567	0.010	0.040	0.048	1.146	0.008	0.483	0.000	0.158	0.223	0.120
1300	195.	0.540	0.010	0.047	0.055	******	******	******	******	******	******	******
1315	210.	0.520	0.010	0.047	0.056	1.069	0.006	0.483	0.000	0.154	0.234	0.127
1330	225.	0.501	0.010	0.043	0.051	******	******	******	******	******	******	******
1345	240.	0.486	0.011	0.038	0.048	1.022	0.004	0.470	0.000	0.152	0.217	0.109
1400	255.	0.469	0.010	0.040	0.049	******	******	******	******	******	******	******
1415	270.	0.457	0.010	0.041	0.048	0.951	0.003	0.473	0.000	0.150	0.222	0.112
1430	285.	0.447	0.010	0.045	0.054	******	******	******	******	******	******	******
1445	300.	0.440	0.010	0.050	0.059	0.906	0.002	0.459	0.000	0.147	0.199	0.091
1500	315.	0.430	0.011	0.036	0.045	******	******	******	******	******	******	******
1515	330.	0.425	0.010	0.026	0.032	0.842	0.002	0.456	0.000	0.143	0.214	0.101
1530	345.	0.420	0.010	0.037	0.045	******	******	******	******	******	******	******
1545	360.	0.418	0.010	0.051	0.059	0.803	0.002	0.455	0.000	0.141	0.197	0.086

EC -242
7-HYDROCARBON MIX #7
1977 NOV 7

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
945	0.	1.02	0.0	0.028	0.002	0.0003	0.0039	0.0002	0.0	0.0	0.0
1000	15.	1.09	******	******	******	******	******	******	******	******	******
1015	30.	1.12	0.016	******	0.132	0.0016	0.0276	0.0065	0.0002	0.0003	0.0002
1030	45.	1.22	******	******	******	******	******	******	******	******	******
1045	60.	1.33	******	0.443	0.164	0.0047	******	0.0122	0.0001	0.0004	0.0002
1100	75.	1.41	******	******	******	******	******	******	******	******	******
1115	90.	1.49	0.110	******	0.172	0.0061	0.0736	0.0182	******	******	******
1130	105.	1.61	******	******	******	******	******	******	******	******	******
1145	120.	1.66	0.125	0.646	0.166	0.0061	0.0700	0.0168	0.0005	0.0007	******
1200	135.	1.73	******	******	******	******	******	******	******	******	******
1215	150.	1.80	0.128	******	0.159	0.0061	0.0773	0.0211	0.0004	0.0009	0.0019
1230	165.	1.86	******	******	******	******	******	******	******	******	******
1245	180.	1.95	0.140	0.575	0.134	0.0045	0.0541	0.0177	******	0.0011	0.0019
1300	195.	2.02	******	******	******	******	******	******	******	******	******
1315	210.	2.10	0.128	******	0.147	0.0049	0.0700	0.0230	******	0.0008	0.0019
1330	225.	2.14	******	******	******	******	******	******	******	******	******
1345	240.	2.24	0.132	0.580	0.127	0.0041	0.0595	0.0191	0.0004	0.0011	0.0017
1400	255.	2.29	******	******	******	******	******	******	******	******	******
1415	270.	2.36	0.128	******	0.135	0.0043	0.0684	0.0239	0.0005	0.0007	0.0022
1430	285.	2.44	******	******	******	******	******	******	******	******	******
1445	300.	2.51	0.114	0.620	0.123	0.0038	0.0603	0.0201	0.0006	0.0013	0.0022
1500	315.	2.54	******	******	******	******	******	******	******	******	******
1515	330.	2.63	0.138	******	0.127	0.0043	0.0706	0.0254	0.0004	0.0007	0.0015
1530	345.	2.68	******	******	******	******	******	******	******	******	******
1545	360.	2.78	0.111	0.673	0.115	0.0039	0.0644	0.0221	0.0006	0.0011	0.0019

EC -242
7-HYDROCARBON MIX #7
1977 NOV 7

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	86.0	50.0	******	0.220	20.00
1000	15.	85.7	51.0	18.80	0.232	******
1015	30.	84.3	54.0	******	0.227	******
1030	45.	84.3	56.5	******	0.222	******
1045	60.	85.2	58.0	19.40	0.230	20.00
1100	75.	85.5	59.5	******	******	******
1115	90.	85.7	60.0	******	******	******
1130	105.	86.0	60.5	******	******	******
1145	120.	85.7	61.0	19.20	0.232	20.00
1200	135.	85.7	61.5	******	******	******
1215	150.	86.2	62.0	******	******	******
1230	165.	86.2	62.0	******	******	******
1245	180.	86.0	62.5	19.50	0.234	20.00
1300	195.	86.2	62.3	******	******	******
1315	210.	86.2	62.5	******	******	******
1330	225.	86.0	62.5	******	******	******
1345	240.	86.5	62.5	19.40	******	20.00
1400	255.	86.0	63.3	******	0.227	******
1415	270.	86.2	63.0	19.60	0.227	******
1430	285.	87.0	62.5	******	******	******
1445	300.	87.0	62.5	19.90	0.244	20.00
1500	315.	86.5	62.5	******	******	******
1515	330.	87.2	62.5	******	******	******
1530	345.	86.5	62.5	******	******	******
1545	360.	87.0	63.3	19.40	0.222	20.00

EC -243
7-HYDROCARBON MIX #7A
1977 NOV 6

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
PEAKS ATTRIBUTED TO C6-N-C OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
DASIBI 1212, TECO 148, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/0.263

T=0 AT 945 PST

	CALIB#
HCHO	2
REL INT	4

TS	DEG K	AVERAGE	301.8
REL HUM	%	AVERAGE	42.12
SSPOWER	KW	AVERAGE	11.46
RADIOM	MW/CM2	AVERAGE	0.229
H2O	PPM	AVERAGE	1.710E 04
NO	PPM	INIT COND	0.266
NO2-CORR	PPM	INIT COND	0.115
ETHENE	PPM	INIT COND	1.939
PROPENE	PPM	INIT COND	0.109
N-C4	PPM	INIT COND	0.508
T2-C4=	PPM	INIT COND	0.110
2,3-DM6	PPM	INIT COND	0.084
TOLUENE	PPM	INIT COND	0.155
M-XYL	PPM	INIT COND	0.154
CO	PPM	INIT COND	0.608
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.100
430.	2.343
403.	1.954
380.	1.616
370.	1.414
360.	1.172
350.	1.000
340.	0.775
330.	0.531
320.	0.293
310.	0.110
300.	0.017
290.	0.000
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.639 L/MIN

20 GC SAMPLES TAKEN

EC -243
7-HYDROCARBON MIX #7A
1977 NOV 8

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NO2-CORR PPM	NOX-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
945	0.	0.000	0.386	0.115	******	0.502	0.502	1.94	0.109	0.568	0.110	0.084	0.155	0.154
1000	15.	0.000	0.223	0.257	******	0.481	0.481	******	******	******	******	******	******	******
1015	30.	0.076	0.055	0.394	0.0	0.447	0.447	1.79	0.087	0.553	0.052	0.060	0.141	0.141
1030	45.	0.303	0.018	0.364	0.0	0.380	0.380	******	******	******	******	******	******	******
1045	60.	0.459	0.012	0.304	0.0	0.315	0.315	1.58	0.055	0.535	0.001	0.075	0.136	0.099
1100	75.	0.567	0.010	0.260	0.0	0.269	0.269	******	******	******	******	******	******	******
1115	90.	0.635	0.010	0.197	0.0	0.204	0.204	1.42	0.034	0.523	0.060	0.071	0.136	0.083
1130	105.	0.686	0.011	0.151	0.0	0.160	0.160	******	******	******	******	******	******	******
1145	120.	0.711	0.009	0.113	0.0	0.119	0.119	1.27	0.019	0.508	0.000	0.068	0.125	0.073
1200	135.	0.716	0.010	0.056	0.0	0.103	0.103	******	******	******	******	******	******	******
1215	150.	0.711	0.009	0.086	0.0	0.092	0.092	1.14	0.011	0.495	0.000	0.065	0.116	0.061

EC -243
7-HYDROCARBON MIX #7A
1977 NOV 8

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR	C6-N-D PPM
945	0.	0.61	0.0	0.0	0.001	0.0001	0.0019	0.0002	0.0	0.0	0.0	0.0
1000	15.	0.70	******	******	******	******	******	******	******	******	******	******
1015	30.	0.67	0.009	******	0.105	0.0004	0.0084	0.0054	0.0002	0.0003	0.0004	0.0006
1030	45.	0.73	******	******	******	******	******	******	******	******	******	******
1045	60.	0.79	0.045	0.223	0.192	0.0037	0.0286	0.0144	0.0004	0.0004	0.0005	0.0009
1100	75.	0.85	******	******	******	******	******	******	******	******	******	******
1115	90.	0.92	0.072	******	0.181	0.0049	0.0336	0.0176	******	******	******	0.0027
1130	105.	1.01	******	******	******	******	******	******	******	******	******	******
1145	120.	1.10	0.100	0.571	0.172	0.0061	0.0407	0.0222	0.0005	0.0005	0.0019	0.0040
1200	135.	1.17	******	******	******	******	******	******	******	******	******	******
1215	150.	1.23	0.100	******	0.145	0.0055	0.0352	0.0215	0.0007	0.0009	0.0012	******

EC -243
7-HYDROCARBON MIX #7A
1977 NOV 8

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	81.3	48.0	18.70	******	20.00
1000	15.	84.0	50.5	******	0.232	******
1015	30.	83.8	53.0	******	0.227	******
1030	45.	84.5	54.0	******	0.230	******
1045	60.	85.2	55.5	19.27	0.225	20.00
1100	75.	85.5	55.5	******	******	******
1115	90.	86.0	56.0	******	******	******
1130	105.	86.0	56.5	******	******	******
1145	120.	86.0	56.5	19.32	0.232	20.00
1200	135.	86.2	56.5	******	0.230	******
1215	150.	86.5	56.5	******	******	******

EC -245
7-HYDROCARBON MIX #6
1977 NOV 9

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
1356: CHAMBER BRIEFLY OPENED TO PUMPING SYSTEM: EST. LESS THAN 2% DILUTION
PEAKS ATTRIBUTED TO C6-N-0 OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
0945: 3-PART SAMPLE DILUTED; PRE T=0 VALUE USED
BRADY 291 NOT CONNECTED TO CHAMBER UNTIL 1532
DASIBI 1212; TECO 14B, BECKMAN 6600, BRADY 291 USED
FACTORS: CO 1.6/0.247

T=0 AT 945 PST

	CALIB#
HCHO	2
REL INT	4
PAN	9

TS	DEG K	AVERAGE	302.6
REL HUM	%	AVERAGE	50.25
SSPOWER	KW	AVERAGE	19.51
RADIOM	MW/CM2	AVERAGE	0.232
H2O	PPM	AVERAGE	9.217E 05
NO	PPM	INIT COND	0.743
NO2-CORR	PPM	INIT COND	0.259
ETHENE	PPM	INIT COND	2.055
PROPENE	PPM	INIT COND	0.104
N-C4	PPM	INIT COND	0.534
T2-C4=	PPM	INIT COND	0.102
2,3-DMB	PPM	INIT COND	0.185
TOLUENE	PPM	INIT COND	0.321
M-XYL	PPM	INIT COND	0.317
CO	PPM	INIT COND	2.502
HCHO	PPM	INIT COND	0.016
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

EC -245
7-HYDROCARBON MIX #6
1977 NOV 9

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.047
430.	2.323
403.	1.948
380.	1.619
370.	1.407
360.	1.168
350.	1.000
340.	0.779
330.	0.532
320.	0.293
310.	0.110
300.	0.016
290.	0.000
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.767 L/MIN

50 GC SAMPLES TAKEN

EC -245
7-HYDROCARBON MIX #6
1977 NOV 9

CLOCK TIME	ELAPSED T(MIN)	O2ONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-AYL PPM
945	0.	0.000	0.743	0.259	0.992	2.055	0.104	0.534	0.102	0.185	0.321	0.317
1000	15.	0.000	0.591	0.391	0.970	******	******	******	******	******	******	******
1015	30.	0.000	0.391	0.560	0.943	1.947	0.090	0.527	0.065	0.179	0.300	0.272
1030	45.	0.027	0.181	0.711	0.889	******	******	******	******	******	******	******
1045	60.	0.130	0.068	0.755	0.818	1.801	0.069	0.512	0.019	0.170	0.269	0.202
1100	75.	0.283	0.032	0.703	0.732	******	******	******	******	******	******	******
1115	90.	0.423	0.022	0.620	0.644	1.634	0.047	0.500	0.001	0.161	0.263	0.177
1130	105.	0.547	0.015	0.536	0.548	******	******	******	******	******	******	******
1145	120.	0.669	0.012	0.443	0.453	1.462	0.028	0.485	0.000	0.152	0.249	0.146
1200	135.	0.774	0.012	0.351	0.358	******	******	******	******	******	******	******
1215	150.	0.843	0.012	0.258	0.266	1.279	0.014	0.469	0.000	0.143	0.245	0.129
1230	165.	0.884	0.010	0.206	0.213	******	******	******	******	******	******	******
1245	180.	0.892	0.012	0.175	0.180	1.121	0.008	0.462	0.000	0.138	0.229	0.106
1300	195.	0.887	0.020	0.145	0.157	******	******	******	******	******	******	******
1315	210.	0.870	0.010	0.112	0.117	1.007	0.004	0.445	0.000	0.131	0.223	0.097
1330	225.	0.845	0.010	0.095	0.100	******	******	******	******	******	******	******
1345	240.	0.816	0.010	0.078	0.085	0.915	0.002	0.444	0.000	0.129	0.220	0.091
1400	255.	0.774	0.010	0.083	0.088	******	******	******	******	******	******	******
1415	270.	0.745	0.012	0.091	0.098	0.805	0.001	0.427	0.000	0.123	0.191	0.070
1430	285.	0.721	0.010	0.090	0.095	******	******	******	******	******	******	******
1445	300.	0.699	0.010	0.090	0.095	0.739	0.001	0.421	0.000	0.121	0.189	0.075
1500	315.	0.679	0.010	0.099	0.106	******	******	******	******	******	******	******
1515	330.	0.664	0.010	0.108	0.115	0.686	0.001	0.416	0.000	0.116	0.186	0.066
1530	345.	0.647	0.010	0.109	0.117	******	******	******	******	******	******	******
1545	360.	0.635	0.010	0.118	0.123	0.628	0.001	0.405	0.000	0.114	0.187	0.065

EC -245
7-HYDROCARBON MIX #6
1977 NOV 9

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
945	0.	2.56	0.0	0.016	0.000	0.0002	0.0016	0.0002	0.0	0.0	0.0
1000	15.	2.59	******	******	******	******	******	******	******	******	******
1015	30.	2.53	0.004	******	0.066	0.0002	0.0097	0.0044	0.0002	0.0004	0.0
1030	45.	2.58	******	******	******	******	******	******	******	******	******
1045	60.	2.60	0.027	0.277	0.128	0.0011	0.0202	0.0066	0.0009	0.0006	0.0005
1100	75.	2.69	******	******	******	******	******	******	******	******	******
1115	90.	2.77	0.061	******	0.164	0.0035	0.0433	0.0154	0.0013	0.0008	0.0010
1130	105.	2.85	******	******	******	******	******	******	******	******	******
1145	120.	2.93	0.100	0.574	0.150	0.0052	0.0584	0.0202	0.0018	0.0013	0.0011
1200	135.	3.02	******	******	******	******	******	******	******	******	******
1215	150.	3.13	0.138	******	0.152	0.0068	0.0758	0.0267	0.0019	0.0012	0.0013
1230	165.	3.28	******	******	******	******	******	******	******	******	******
1245	180.	3.36	0.150	0.639	0.135	0.0069	0.0722	0.0262	******	******	******
1300	195.	3.45	******	******	******	******	******	******	******	******	******
1315	210.	3.51	0.176	******	0.131	0.0068	0.0817	0.0300	0.0016	0.0016	0.0022
1330	225.	3.59	******	******	******	******	******	******	******	******	******
1345	240.	3.66	0.194	0.778	0.125	0.0066	0.0841	0.0322	0.0023	0.0017	0.0026
1400	255.	3.78	******	******	******	******	******	******	******	******	******
1415	270.	3.75	0.176	******	0.104	0.0052	0.0644	0.0253	0.0013	0.0011	0.0019
1430	285.	3.66	******	******	******	******	******	******	******	******	******
1445	300.	3.89	0.183	0.685	0.113	0.0055	0.0810	0.0323	0.0013	0.0008	0.0011
1500	315.	3.97	******	******	******	******	******	******	******	******	******
1515	330.	4.02	0.164	******	0.102	0.0052	0.0778	0.0315	0.0016	0.0013	0.0011
1530	345.	4.12	******	******	******	******	******	******	******	******	******
1545	360.	4.18	0.162	0.712	0.107	0.0051	0.0837	0.0352	0.0012	0.0012	0.0009

EC -245
7-HYDROCARBON MIX #6
1977 NOV 9

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
945	0.	84.3	******	19.40	0.225	20.00
1000	15.	84.8	******	******	0.232	******
1015	30.	84.5	******	******	0.230	******
1030	45.	85.0	******	******	0.227	******
1045	60.	86.2	******	19.40	0.230	20.00
1100	75.	86.2	******	******	******	******
1115	90.	86.5	******	******	******	******
1130	105.	86.7	******	******	******	******
1145	120.	87.0	******	19.80	0.242	20.00
1200	135.	86.7	******	******	0.232	******
1215	150.	86.5	******	******	0.225	******
1230	165.	86.5	******	******	0.227	******
1245	180.	86.0	******	19.30	0.230	20.00
1300	195.	86.2	******	******	******	******
1315	210.	86.5	******	******	******	******
1330	225.	86.5	******	******	******	******
1345	240.	86.7	******	19.50	0.234	20.00
1400	255.	87.0	******	******	******	******
1415	270.	86.7	******	******	******	******
1430	285.	86.5	******	******	******	******
1445	300.	86.5	******	19.60	0.234	20.00
1500	315.	86.5	******	******	******	******
1515	330.	87.2	******	******	******	******
1530	345.	86.7	50.5	******	******	******
1545	360.	87.0	50.0	19.60	0.239	20.00

EC -246
7-HYDROCARBON MIX #1
1977 NOV 10

BEGIN IRRADIATION 0930: 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
PEAKS ATTRIBUTED TO C6-N-D OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
OASIS1 1212, TECO 148, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/0.227

T=G AT 930 PST

	CALIB#
HCHO	2
PAN	9
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	52.57
SSPOWER	KW	AVERAGE	19.25
RADIOM	MW/CM2	AVERAGE	C.232
H2O	PPM	AVERAGE	2.225E 04
NO	PPM	INIT CCND	C.386
NO2-CORR	PPM	INIT CCND	0.122
ETHENE	PPM	INIT CCND	C.253
PROPENE	PPM	INIT CCND	0.049
N-C4	PPM	INIT CCND	1.C58
T2-C4=	PPM	INIT CCND	0.026
2,3-DMB	PPM	INIT CCND	0.538
TOLUENE	PPM	INIT CCND	C.023
M-XYL	PPM	INIT CCND	0.023
ACETONE	PPM	INIT CCND	C.002
MEK	PPM	INIT CCND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	3.046
430.	2.332
403.	1.550
380.	1.609
370.	1.402
360.	1.159
350.	1.000
340.	0.776
330.	0.526
320.	0.288
310.	0.111
300.	0.016
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.617 L/MIN

74 GC SAMPLES TAKEN

EC -246
7-HYDROCARBON MIX #1
1977 NOV 10

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	PROPENE PPM	N-C4 PPM	T2-C4= PPM	2,3-DMB PPM	TOLUENE PPM	M-XYL PPM
930	0.	0.000	0.386	0.122	0.506	0.253	0.049	1.058	0.026	0.538	0.023	0.023
945	15.	0.000	0.336	0.162	0.497	******	******	******	******	******	******	******
1000	30.	0.000	0.282	0.212	0.493	0.235	0.042	1.010	0.018	0.522	0.022	0.021
1015	45.	0.000	0.232	0.254	0.484	******	******	******	******	******	******	******
1030	60.	0.002	0.189	0.283	0.472	0.226	0.041	1.058	0.012	0.511	0.021	0.019
1045	75.	0.012	0.150	0.314	0.461	******	******	******	******	******	******	******
1100	90.	0.022	0.118	0.351	0.469	0.216	0.038	1.082	0.007	0.498	0.019	0.016
1115	105.	0.032	0.090	0.353	0.444	******	******	******	******	******	******	******
1130	120.	0.051	0.073	0.364	0.436	0.212	0.031	1.019	0.003	0.476	0.020	0.015
1145	135.	0.066	0.057	0.374	0.431	******	******	******	******	******	******	******
1200	150.	0.088	0.049	0.364	0.411	0.201	0.027	1.010	0.001	0.466	0.019	0.014
1215	165.	0.105	0.040	0.365	0.406	******	******	******	******	******	******	******
1230	180.	0.127	0.035	0.353	0.388	0.194	0.022	1.001	0.000	0.457	0.019	0.014
1245	195.	0.144	0.033	0.343	0.374	******	******	******	******	******	******	******
1300	210.	0.169	0.028	0.339	0.363	0.184	0.019	0.982	0.0	0.443	0.019	0.014
1315	225.	0.186	0.027	0.327	0.352	******	******	******	******	******	******	******
1330	240.	0.205	0.024	0.320	0.338	0.175	0.015	0.969	0.0	0.433	0.015	0.009
1345	255.	0.225	0.022	0.305	0.326	******	******	******	******	******	******	******
1400	270.	0.247	0.021	0.292	0.309	0.163	0.012	0.953	0.0	0.421	0.018	0.011
1415	285.	0.266	0.020	0.276	0.295	******	******	******	******	******	******	******
1430	300.	0.288	0.018	0.265	0.281	0.156	0.009	0.931	0.0	0.407	0.016	0.009
1445	315.	0.305	0.026	0.244	0.267	******	******	******	******	******	******	******
1500	330.	0.330	0.017	0.237	0.252	0.143	0.007	0.918	0.0	0.393	0.017	0.009
1515	345.	0.352	0.016	0.225	0.238	******	******	******	******	******	******	******
1530	360.	0.374	0.016	0.211	0.225	0.134	0.005	0.878	0.0	0.379	0.015	0.007
1545	375.	0.391	0.013	0.200	0.211	******	******	******	******	******	******	******
1600	390.	0.415	0.012	0.183	0.194	0.124	0.004	0.873	0.0	0.366	0.015	0.007
1615	405.	0.437	0.011	0.169	0.180	******	******	******	******	******	******	******
1630	420.	0.459	0.012	0.163	0.173	******	******	******	******	******	******	******
1645	435.	0.479	0.011	0.146	0.154	******	******	******	******	******	******	******
1700	450.	0.501	0.011	0.136	0.143	0.106	0.002	0.767	0.0	0.332	0.013	0.005
1715	465.	0.516	0.010	0.129	0.135	******	******	******	******	******	******	******
1730	480.	0.533	0.020	0.112	0.125	0.100	0.001	0.841	0.0	0.333	0.014	0.005
1745	495.	0.547	0.010	0.105	0.113	******	******	******	******	******	******	******
1800	510.	0.557	0.010	0.096	0.105	0.094	0.001	0.794	0.0	0.316	0.014	0.005
1815	525.	0.564	0.010	0.090	0.097	******	******	******	******	******	******	******
1830	540.	0.569	0.010	0.086	0.093	0.087	0.001	0.809	0.0	0.310	0.014	0.005
1845	555.	0.569	0.010	0.084	0.090	******	******	******	******	******	******	******
1900	570.	0.574	0.009	0.080	0.085	0.081	0.000	0.782	0.0	0.300	0.012	0.004

EC -246
7-HYDROCARBON MIX #1
1977 NOV 10

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	C3-N-2 PPM PANALYZR	C4-N-2 PPM PANALYZR
930	0.	0.0	0.000	0.0	******	0.0002	0.002	0.0006	0.0	0.0	0.0
945	15.	0.0	0.000	******	******	******	******	******	0.0	0.0	0.0
1000	30.	0.0	0.000	******	******	0.0002	0.017	0.0050	0.0001	0.0004	0.0
1015	45.	0.0	******	******	******	******	******	******	******	******	******
1030	60.	0.0	0.003	0.012	0.0337	0.0004	0.038	0.0116	0.0002	0.0010	0.0011
1045	75.	0.0	******	******	******	******	******	******	******	******	******
1100	90.	0.03	0.005	******	0.0424	0.0005	0.052	0.0160	0.0002	0.0013	0.0016
1115	105.	0.05	******	******	******	******	******	******	******	******	******
1130	120.	0.08	0.007	0.121	0.0626	0.0009	0.073	0.0224	******	0.0016	0.0022
1145	135.	0.08	******	******	******	******	******	******	******	******	******
1200	150.	0.12	0.011	******	0.0654	0.0009	0.084	0.0240	******	0.0016	0.0029
1215	165.	0.15	******	******	******	******	******	******	******	******	******
1230	180.	0.17	0.015	0.030	0.0703	0.0014	0.104	0.0299	0.0002	0.0022	0.0029
1245	195.	0.17	******	******	******	******	******	******	******	******	******
1300	210.	0.24	0.019	******	0.0729	0.0017	0.117	0.0337	0.0002	0.0021	0.0029
1315	225.	0.25	******	******	******	******	******	******	******	******	******
1330	240.	0.29	0.022	0.033	0.0619	0.0017	0.096	0.0232	0.0003	0.0023	0.0028
1345	255.	0.32	******	******	******	******	******	******	******	******	******
1400	270.	0.34	0.028	******	0.0797	0.0023	0.145	0.0418	0.0003	0.0030	0.0037
1415	285.	0.39	******	******	******	******	******	******	******	******	******
1430	300.	0.37	0.030	0.039	0.0816	0.0023	0.127	0.0330	0.0004	0.0032	0.0038
1445	315.	0.43	******	******	******	******	******	******	******	******	******
1500	330.	0.46	0.036	******	0.0777	0.0026	0.175	0.0496	0.0003	0.0033	0.0038
1515	345.	0.49	******	******	******	******	******	******	******	******	******
1530	360.	0.48	0.041	0.121	0.0772	0.0028	0.161	0.0386	0.0003	0.0035	0.0038
1545	375.	0.51	******	******	******	******	******	******	******	******	******
1600	390.	0.55	0.048	******	0.0875	0.0034	0.207	******	0.0003	0.0036	0.0044
1615	405.	0.56	******	******	******	******	******	******	******	******	******
1630	420.	0.62	0.053	******	******	******	******	******	0.0003	0.0040	0.0046
1645	435.	0.63	******	******	******	******	******	******	******	******	******
1700	450.	0.67	0.057	******	0.0715	0.0034	0.214	0.0556	0.0005	0.0043	0.0048
1715	465.	0.70	******	******	******	******	******	******	******	******	******
1730	480.	0.70	0.060	******	0.0857	0.0040	0.254	0.0716	0.0005	0.0046	0.0063
1745	495.	0.72	******	******	******	******	******	******	******	******	******
1800	510.	0.75	0.067	******	0.0829	0.0037	0.232	0.0578	0.0005	0.0046	0.0075
1815	525.	0.79	******	******	******	******	******	******	******	******	******
1830	540.	0.84	0.068	0.078	0.0893	0.0047	0.270	0.0766	0.0005	0.0048	0.0069
1845	555.	0.82	******	******	******	******	******	******	******	******	******
1900	570.	0.89	0.070	******	0.0762	0.0037	0.217	0.0422	0.0005	0.0046	0.0069

EC -246
7-HYDROCARBON MIX #1
1977 NOV 10

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MR/CM2	HCHO VOL L
930	0.	84.8	44.5	18.70	0.225	20.00
945	15.	84.5	46.5	******	0.227	******
1000	30.	84.8	49.5	18.70	0.227	******
1015	45.	85.0	51.0	******	******	******
1030	60.	85.7	52.0	******	0.234	20.00
1045	75.	86.0	52.5	******	******	******
1100	90.	86.5	53.0	******	******	******
1115	105.	86.5	53.0	******	******	******
1130	120.	86.7	53.0	19.10	0.227	20.00
1145	135.	86.5	53.0	******	******	******
1200	150.	87.2	53.0	******	******	******
1215	165.	86.7	53.0	******	******	******
1230	180.	87.0	53.5	19.40	0.232	20.00
1245	195.	86.7	53.5	******	0.230	******
1300	210.	87.0	53.5	******	0.227	******
1315	225.	86.7	54.0	******	******	******
1330	240.	86.7	54.0	19.50	0.239	20.00
1345	255.	86.5	54.0	******	0.232	******
1400	270.	86.7	54.0	******	0.230	******
1415	285.	87.0	54.0	******	0.227	******
1430	300.	87.0	54.0	19.40	0.230	20.00
1445	315.	87.0	54.0	******	******	******
1500	330.	87.2	54.0	******	******	******
1515	345.	86.7	54.0	******	******	******
1530	360.	87.0	54.0	19.70	0.239	20.00
1545	375.	86.7	54.0	******	******	******
1600	390.	87.2	53.5	******	******	******
1615	405.	86.7	53.5	******	******	******
1630	420.	87.2	53.5	19.70	0.239	******
1645	435.	87.0	53.5	******	******	******
1700	450.	87.0	53.5	******	******	******
1715	465.	86.2	53.5	******	******	******
1730	480.	86.7	53.5	19.40	0.220	******
1745	495.	86.5	53.5	******	******	******
1800	510.	86.0	53.5	******	******	******
1815	525.	86.2	53.5	******	******	******
1830	540.	86.7	53.5	19.00	0.239	20.00
1845	555.	86.2	53.5	******	0.234	******
1900	570.	86.2	53.5	19.10	0.237	******

EC -247
7-HYDROCARBON MIX #8
1977 NOV 11

BEGIN IRRADIATION 0845; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
PEAKS ATTRIBUTED TO C6-N-0 OBSERVED ON PANALYZER, BUT DATA NOT QUANTIFIABLE
C3-N-2 INCLUDES SMALL AMOUNTS OF C2-N
GC-MS DATA INDICATE THAT C2-N IS LESS THAN C3-N-1 OR C3-N-2
AROMATICS AND OXYGENATES MONITORED WITH 3-PART COLUMN
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
DaSIoI 1212, TECO 14E, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/0.235

T=0 AT 0645 PST

	CALIB#
HCHO	2
PAN	5
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	54.30
SSPOWER	KW	AVERAGE	19.30
RADIUM	MW/CM2	AVERAGE	0.230
H2O	PPM	AVERAGE	2.275E 04
NO	PPM	INIT COND	0.380
NO2-CORR	PPM	INIT COND	0.125
ETHENE	PPM	INIT COND	1.025
PROPENE	PPM	INIT COND	0.054
N-C4	PPM	INIT COND	0.273
T2-C4=	PPM	INIT COND	0.053
2,3-DM6	PPM	INIT COND	0.080
TOLUENE	PPM	INIT COND	0.145
M-XYL	PPM	INIT COND	0.145
CO	PPM	INIT COND	0.436
HCHO	PPM	INIT COND	0.003
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

EC -247
7-HYDRCCARBCN MIX #8
1977 NCV 11

SPECTRAL DISTRIBUTICN: WAVELENGTH(NM)	REL. INTENSITY
500.	3.024
430.	2.515
403.	1.941
380.	1.610
370.	1.401
360.	1.170
350.	1.000
340.	0.781
330.	0.531
320.	0.293
310.	0.112
300.	0.017
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.650 L/MIN

41 GC SAMPLES TAKEN

EC -247
7-HYDROCARBON MIX #8
1977 NOV 11

CLOCK TIME	ELAPSED T(MIN)	CO PPM	H2O2 PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	C3-N-2 PPM PANALYZER	C4-N-2 PPM PANALYZER
645	0.	0.44	******	0.000	0.003	0.001	0.0001	0.0021	0.0001	0.0	0.0	0.0
900	15.	0.45	******	******	******	******	******	******	******	******	******	******
915	30.	0.47	0.004	0.002	******	0.031	0.0000	0.0076	0.0023	0.0	0.0	0.0
930	45.	0.47	******	******	******	******	******	******	******	******	******	******
945	60.	0.50	******	0.016	0.141	0.054	0.0002	0.0178	0.0036	0.0002	0.0001	0.0006
1000	75.	0.57	******	******	******	******	******	******	******	******	******	******
1015	90.	0.62	******	0.036	******	0.072	0.0005	0.0484	0.0080	0.0006	0.0003	0.0006
1030	105.	0.64	******	******	******	******	******	******	******	******	******	******
1045	120.	0.69	******	0.053	0.230	0.070	0.0007	0.0586	0.0092	0.0006	0.0004	0.0009
1100	135.	0.74	******	******	******	******	******	******	******	******	******	******
1115	150.	0.87	******	******	******	0.068	0.0010	0.0746	0.0120	******	******	******
1130	165.	0.85	******	******	******	******	******	******	******	******	******	******
1145	180.	0.92	******	0.083	0.377	0.063	0.0012	0.0683	0.0130	0.0009	0.0005	0.0011
1200	195.	0.99	******	******	******	******	******	******	******	******	******	******
1215	210.	1.04	0.020	0.095	******	0.064	0.0011	0.0688	0.0141	0.0009	0.0007	0.0011
1230	225.	1.10	******	******	******	******	******	******	******	******	******	******
1245	240.	1.13	******	0.102	0.276	0.066	0.0011	0.0836	0.0172	0.0009	0.0006	******
1300	255.	1.18	******	******	******	******	******	******	******	******	******	******
1315	270.	1.25	******	0.104	******	0.057	0.0011	0.0671	0.0156	0.0008	0.0009	******
1330	285.	1.27	******	******	******	******	******	******	******	******	******	******
1345	300.	1.35	******	0.106	0.177	0.054	0.0011	0.0771	0.0167	0.0008	0.0009	0.0011

EC -247
7-HYDROCARBON MIX #8
1977 NOV 11

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	H2O2 VOL PPM
845	0.	83.8	46.5	18.70	******	20.00	******
900	15.	84.5	48.0	******	0.232	******	******
915	30.	85.0	51.0	18.90	0.227	******	30.0
930	45.	85.2	53.0	******	0.225	******	******
945	60.	85.7	53.5	19.20	0.230	20.00	******
1000	75.	86.0	54.0	******	******	******	******
1015	90.	86.2	54.5	******	******	******	******
1030	105.	86.5	55.0	******	******	******	******
1045	120.	87.2	55.0	19.50	0.234	20.00	******
1100	135.	87.2	55.5	******	******	******	******
1115	150.	87.0	55.5	******	******	******	******
1130	165.	86.5	55.5	******	******	******	******
1145	180.	87.0	55.5	19.90	0.237	20.00	******
1200	195.	86.7	55.5	******	******	******	******
1215	210.	87.2	55.5	******	******	******	30.0
1230	225.	87.2	55.5	******	******	******	******
1245	240.	87.2	55.5	19.50	0.244	20.00	******
1300	255.	87.4	55.5	******	******	******	******
1315	270.	87.0	55.5	******	******	******	******
1330	285.	87.2	55.5	******	******	******	******
1345	300.	87.0	55.5	19.40	0.230	15.00	******

EC -250
FORMALDEHYDE
1977 NOV 16

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
0842-0852: FLUSH 0.411 TORR HCHO IN 5.467 L BULB INTO EC THROUGH DISPERSER TUBE
CALCULATED HCHO INJECTED = 0.540 PPM IN EC.
HCHO WAS FLUSHED INTO THE CHAMBER AFTER THE PURE-AIR FILL.
SOME HCHO PROBABLY TRANSFERRED TO MAKEUP-AIR BAG
N-C4 AND NEO-C5 ADDED AS TRACERS FOR OH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
DASIBI 1212, TECO 148, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/.256

T=0 AT 1000 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.5
REL HUM	%	AVERAGE	51.82
SSPOWER	KW	AVERAGE	19.60
RADIOM	MW/CM2	AVERAGE	0.231
H2O	PPM	AVERAGE	2.220E 04
NO	PPM	INIT COND	0.011
NO2-CORR	PPM	INIT COND	0.012
HCHO	PPM	INIT COND	0.328
N-C4	PPM	INIT COND	0.007
NEO-C5	PPM	INIT COND	0.008
CO	PPM	INIT COND	2.105
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	1.043
ETHANE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.006
ACETYLEN	PPM	INIT COND	0.006
PROPANE	PPM	INIT COND	0.007

* ASSIGNED INITIAL CONDITION

EC -250
FORMALDEHYDE
1977 NOV 16

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.177
430.	2.341
403.	2.037
380.	1.630
370.	1.421
360.	1.167
350.	1.000
340.	0.773
330.	0.527
320.	0.288
310.	0.110
300.	0.016
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.693 L/MIN

30 GC SAMPLES TAKEN

EC -250
FORMALDEHYDE
1977 NOV 16

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	HCHO PPM	N-C4 PPM	NEO-C5 PPM
828	-92.	******	******	******	******	******	.00013	.0
935	-25.	******	******	******	******	******	.00714	.00763
1000	0.	0.000	0.011	0.012	0.023	0.328	.00718	.00763
1015	15.	0.015	0.008	0.014	0.023	******	******	******
1030	30.	0.034	0.008	0.015	0.023	******	******	******
1045	45.	0.054	0.008	0.016	0.024	******	******	******
1100	60.	0.071	0.008	0.016	0.024	0.242	******	******
1115	75.	0.090	0.008	0.017	0.025	******	******	******
1130	90.	0.103	0.008	0.017	0.025	******	******	******
1145	105.	0.117	0.009	0.017	0.026	******	******	******
1200	120.	0.127	0.008	0.018	0.026	0.186	******	******
1215	135.	0.139	0.008	0.020	0.028	******	******	******
1230	150.	0.147	0.007	0.019	0.026	******	******	******
1245	165.	0.156	0.008	0.021	0.029	******	******	******
1300	180.	0.164	0.007	0.020	0.027	0.059	.00580	.00685
1315	195.	0.169	0.007	0.021	0.028	******	******	******
1330	210.	0.176	0.009	0.019	0.028	******	******	******
1345	225.	0.183	0.008	0.020	0.028	******	******	******
1400	240.	0.188	0.008	0.021	0.029	0.051	******	******
1415	255.	0.193	0.008	0.022	0.029	******	******	******
1430	270.	0.198	0.009	0.021	0.029	******	******	******
1445	285.	0.198	0.008	0.021	0.030	******	******	******
1500	300.	0.203	0.009	0.021	0.030	0.030	******	******
1515	315.	0.208	0.008	0.021	0.029	******	******	******
1530	330.	0.208	0.008	0.022	0.030	******	******	******
1545	345.	0.213	0.008	0.022	0.030	******	******	******
1600	360.	0.213	0.012	0.018	0.031	0.024	.00460	.00603

EC -250
FORMALDEHYDE
1977 NOV 16

CLOCK TIME	ELAPSED T(MIN)	CO PPM	H2O2 PPM	PAN PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	METHANE PPM	ETHANE PPM	ETHENE PPM
828	-92.	******	******	******	0.0007	0.0001	0.0010	0.0	0.0001	0.0000	1.06	0.0049	0.0033
935	-25.	******	******	******	******	******	******	******	******	******	******	******	******
1000	0.	2.11	0.0	0.000	0.0010	0.0005	0.0016	0.0001	0.0004	0.0	1.04	0.0046	0.0032
1015	15.	2.17	******	******	******	******	******	******	******	******	******	******	******
1030	30.	2.15	0.0	0.000	******	******	******	******	******	******	******	******	******
1045	45.	2.20	******	******	******	******	******	******	******	******	******	******	******
1100	60.	2.27	******	0.001	******	******	******	******	******	******	******	******	******
1115	75.	2.27	******	******	******	******	******	******	******	******	******	******	******
1130	90.	2.35	0.022	0.002	******	******	******	******	******	******	******	******	******
1145	105.	2.36	******	******	******	******	******	******	******	******	******	******	******
1200	120.	2.40	******	0.003	******	******	******	******	******	******	******	******	******
1215	135.	2.43	******	******	******	******	******	******	******	******	******	******	******
1230	150.	2.47	0.0	0.004	******	******	******	******	******	******	******	******	******
1245	165.	2.50	******	******	******	******	******	******	******	******	******	******	******
1300	180.	2.50	******	0.003	0.0045	0.0014	0.0288	0.0014	0.0045	0.0	1.06	0.0047	0.0021
1315	195.	2.52	******	******	******	******	******	******	******	******	******	******	******
1330	210.	2.58	******	0.005	******	******	******	******	******	******	******	******	******
1345	225.	2.56	0.0	******	******	******	******	******	******	******	******	******	******
1400	240.	2.58	******	******	******	******	******	******	******	******	******	******	******
1415	255.	2.61	******	******	******	******	******	******	******	******	******	******	******
1430	270.	2.62	0.0	0.005	******	******	******	******	******	******	******	******	******
1445	285.	2.69	******	******	******	******	******	******	******	******	******	******	******
1500	300.	2.69	******	0.007	******	******	******	******	******	******	******	******	******
1515	315.	2.67	******	******	******	******	******	******	******	******	******	******	******
1530	330.	2.70	0.0	0.007	******	******	******	******	******	******	******	******	******
1545	345.	2.73	******	******	******	******	******	******	******	******	******	******	******
1600	360.	2.73	******	0.007	0.0060	0.0020	0.0384	******	******	0.0001	1.06	0.0047	0.0015

EC -250
FORMALDEHYDE
1977 NOV 16

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM
828	-92.	0.0067	0.0067	0.0072	0.000	0.0001
935	-25.	******	******	******	******	******
1000	0.	0.0064	******	0.0070	0.000	0.0001
1015	15.	******	******	******	******	******
1030	30.	******	******	******	******	******
1045	45.	******	******	******	******	******
1100	60.	******	******	******	******	******
1115	75.	******	******	******	******	******
1130	90.	******	******	******	******	******
1145	105.	******	******	******	******	******
1200	120.	******	******	******	******	******
1215	135.	******	******	******	******	******
1230	150.	******	******	******	******	******
1245	165.	******	******	******	******	******
1300	180.	0.0059	******	0.0066	0.000	0.0001
1315	195.	******	******	******	******	******
1330	210.	******	******	******	******	******
1345	225.	******	******	******	******	******
1400	240.	******	******	******	******	******
1415	255.	******	******	******	******	******
1430	270.	******	******	******	******	******
1445	285.	******	******	******	******	******
1500	300.	******	******	******	******	******
1515	315.	******	******	******	******	******
1530	330.	******	******	******	******	******
1545	345.	******	******	******	******	******
1600	360.	0.0058	******	0.0060	0.000	0.0001

EC -250
FORMALDEHYDE
1977 NOV 16

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADION MW/CM2	HCHO VOL L	H2O2 VOL PPM
828	-92.	******	******	******	******	******	******
935	-25.	******	******	******	******	******	******
1000	0.	84.5	45.5	19.14	0.230	10.00	30.0
1015	15.	84.5	47.5	******	0.230	******	******
1030	30.	85.0	50.0	******	0.232	******	30.0
1045	45.	85.2	51.5	******	0.227	******	******
1100	60.	85.7	52.5	19.23	0.225	20.00	******
1115	75.	86.5	53.0	******	******	******	******
1130	90.	86.5	53.0	******	******	******	30.0
1145	105.	86.7	53.0	******	******	******	******
1200	120.	87.0	53.5	20.02	0.234	20.00	******
1215	135.	86.7	53.5	******	******	******	******
1230	150.	87.0	53.0	******	******	******	30.0
1245	165.	87.2	53.5	******	******	******	******
1300	180.	87.2	53.5	19.54	0.227	20.00	******
1315	195.	87.7	53.5	******	******	******	******
1330	210.	87.4	53.0	******	******	******	******
1345	225.	87.2	53.5	******	******	******	20.0
1400	240.	87.4	53.0	19.49	0.230	20.00	******
1415	255.	87.7	53.0	******	******	******	******
1430	270.	87.4	53.0	******	******	******	30.0
1445	285.	87.7	53.0	******	******	******	******
1500	300.	87.4	53.0	19.54	0.232	20.00	******
1515	315.	87.4	53.0	******	0.232	******	******
1530	330.	87.7	53.0	******	******	******	30.0
1545	345.	87.2	53.0	******	******	******	******
1600	360.	87.9	53.0	20.25	0.232	20.00	******

EC -250
FORMALDEHYDE
1977 NOV 16

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT NO3 PPM	TOT N PPM	H2O PPM	HCTOT PPMC
828	-92.	******	******	******	******	******	0.378
935	-25.	******	******	******	******	******	0.419
1000	0.	0.012	0.023	0.000	0.023	18157.	0.420
1015	15.	0.014	0.023	0.000	0.023	18955.	******
1030	30.	0.015	0.024	0.000	0.024	20268.	******
1045	45.	0.017	0.025	0.001	0.025	21039.	******
1100	60.	0.018	0.026	0.001	0.026	21785.	******
1115	75.	0.019	0.027	0.002	0.027	22512.	******
1130	90.	0.019	0.027	0.002	0.027	22512.	******
1145	105.	0.020	0.028	0.002	0.028	22687.	******
1200	120.	0.021	0.029	0.003	0.029	23080.	******
1215	135.	0.024	0.031	0.003	0.032	22901.	******
1230	150.	0.023	0.030	0.004	0.030	22864.	******
1245	165.	0.025	0.033	0.003	0.033	23260.	******
1300	180.	0.023	0.031	0.003	0.031	23260.	0.260
1315	195.	0.024	0.032	0.004	0.032	23623.	******
1330	210.	0.023	0.032	0.005	0.032	23222.	******
1345	225.	0.025	0.033	0.005	0.033	23260.	******
1400	240.	0.026	0.033	0.005	0.034	23222.	******
1415	255.	0.027	0.034	0.005	0.034	23402.	******
1430	270.	0.026	0.034	0.005	0.034	23222.	******
1445	285.	0.027	0.036	0.006	0.036	23402.	******
1500	300.	0.028	0.037	0.007	0.037	23222.	******
1515	315.	0.028	0.036	0.007	0.036	23222.	******
1530	330.	0.029	0.037	0.007	0.037	23402.	******
1545	345.	0.029	0.037	0.007	0.037	23042.	******
1600	360.	0.026	0.038	0.007	0.038	23584.	0.259

EC -251
FORMALDEHYDE + NOX
1977 NOV 17

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
0826-0835: FLUSH 0.417 TORR HCHO IN 5.467 L BULB INTO EC THROUGH DISPERSER TUBE
CALCULATED HCHO INJECTED = 0.550 PPM IN EC
HCHO WAS FLUSHED INTO THE CHAMBER AFTER THE PURE AIR FILL.
ABOUT 130 PPB HCHO OBSERVED IN MAKEUP-AIR BAG
N-C4 AND NEO-C5 ADDED AS TRACERS FOR OH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
DASIBI 1212, TECO 14B, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/.277

T=0 AT 1000 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.4
REL HUM	%	AVERAGE	52.07
SSPOWER	KW	AVERAGE	19.79
RADIOM	MW/CM2	AVERAGE	0.229
H2O	PPM	AVERAGE	2.230E 04
NO	PPM	INIT COND	0.080
NO2-CORR	PPM	INIT COND	0.033
HCHO	PPM	INIT COND	0.193
N-C4	PPM	INIT COND	0.006
NEO-C5	PPM	INIT COND	0.008
CO	PPM	INIT COND	1.491
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002
MEK	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.675
ETHANE	PPM	INIT COND	0.004
ETHENE	PPM	INIT COND	0.003
PROPANE	PPM	INIT COND	0.007

* ASSIGNED INITIAL CONDITION

EC -251
FORMALDEHYDE + NOX
1977 NOV 17

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	H2O2 VOL PPM
930	-30.	******	******	******	******	******	******
1000	0.	85.7	44.0	19.35	0.203	10.00	30.0
1015	15.	86.0	45.5	******	0.230	******	******
1030	30.	85.2	48.5	******	0.225	******	30.0
1045	45.	85.2	50.5	******	0.225	******	******
1100	60.	85.7	52.0	19.71	0.230	20.00	******
1115	75.	86.2	53.0	******	******	******	******
1130	90.	87.0	53.5	******	******	******	30.0
1145	105.	87.2	53.5	******	******	******	******
1200	120.	87.7	54.0	19.76	0.230	20.00	******
1215	135.	87.7	54.0	******	******	******	******
1230	150.	87.4	54.0	******	******	******	30.0
1245	165.	87.2	54.0	******	******	******	******
1300	180.	87.4	54.0	20.02	0.232	20.00	******
1315	195.	87.4	54.5	******	******	******	******
1330	210.	87.2	54.5	******	******	******	30.0
1345	225.	87.2	54.5	******	******	******	******
1400	240.	87.4	54.5	19.98	0.232	20.00	******
1415	255.	87.4	54.5	******	******	******	******
1430	270.	87.2	54.0	******	******	******	30.0
1445	285.	87.4	54.0	******	******	******	******
1500	300.	87.2	54.0	19.58	0.227	20.00	******
1515	315.	87.2	54.0	******	******	******	******
1530	330.	87.9	54.0	******	******	******	30.0
1545	345.	87.2	54.0	******	******	******	******
1600	360.	87.7	54.0	20.11	0.237	20.00	******

EC -251
FORMALDEHYDE + NOX
1977 NOV 17

CLOCK TIME	ELAPSED T(MIN)	PROPANE PPM	PROPENE PPM	I-C4 PPM
930	-30.	******	******	******
1000	0.	0.0065	0.000	0.0001
1015	15.	******	******	******
1030	30.	******	******	******
1045	45.	******	******	******
1100	60.	******	******	******
1115	75.	******	******	******
1130	90.	******	******	******
1145	105.	******	******	******
1200	120.	******	******	******
1215	135.	******	******	******
1230	150.	******	******	******
1245	165.	******	******	******
1300	180.	0.0058	0.000	0.0001
1315	195.	******	******	******
1330	210.	******	******	******
1345	225.	******	******	******
1400	240.	******	******	******
1415	255.	******	******	******
1430	270.	******	******	******
1445	285.	******	******	******
1500	300.	******	******	******
1515	315.	******	******	******
1530	330.	******	******	******
1545	345.	******	******	******
1600	360.	******	******	******

EC -251
FORMALDEHYDE + NOX
1977 NOV 17

CLOCK TIME	ELAPSED T(MIN)	CO PPM	H2O2 PPM	PAN PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (DMS)
930	-30.	******	******	******	******	******	******	******	******	******	******	******	******	******
1000	0.	1.49	0.0	0.000	0.0012	0.0004	0.0023	0.0001	0.0005	0.0	1.07	0.0045	0.0030	******
1015	15.	1.50	******	******	******	******	******	******	******	******	******	******	******	******
1030	30.	1.60	0.003	0.001	******	******	******	******	******	******	******	******	******	******
1045	45.	1.66	******	******	******	******	******	******	******	******	******	******	******	******
1100	60.	1.70	******	0.002	******	******	******	******	******	******	******	******	******	******
1115	75.	1.72	******	******	******	******	******	******	******	******	******	******	******	******
1130	90.	1.76	0.013	0.002	******	******	******	******	******	******	******	******	******	******
1145	105.	1.80	******	******	******	******	******	******	******	******	******	******	******	******
1200	120.	1.83	******	0.004	******	******	******	******	******	******	******	******	******	******
1215	135.	1.87	******	******	******	******	******	******	******	******	******	******	******	******
1230	150.	1.87	0.012	******	******	******	******	******	******	******	******	******	******	******
1245	165.	1.90	******	******	******	******	******	******	******	******	******	******	******	******
1300	180.	1.91	******	0.006	0.0049	0.0023	0.0367	0.0011	0.0011	******	******	******	******	******
1315	195.	1.94	******	******	******	******	******	******	******	******	1.08	0.0043	0.0015	******
1330	210.	1.98	0.007	0.006	******	******	******	******	******	******	******	******	******	******
1345	225.	1.97	******	******	******	******	******	******	******	******	******	******	******	******
1400	240.	2.01	******	0.007	******	******	******	******	******	******	******	******	******	******
1415	255.	2.04	******	******	******	******	******	******	******	******	******	******	******	******
1430	270.	2.04	0.012	0.008	******	******	******	******	******	******	******	******	******	******
1445	285.	2.04	******	******	******	******	******	******	******	******	******	******	******	******
1500	300.	2.04	******	0.008	******	******	******	******	******	******	******	******	******	******
1515	315.	2.07	******	******	******	******	******	******	******	******	******	******	******	******
1530	330.	2.10	0.010	0.009	******	******	******	******	******	******	******	******	******	******
1545	345.	2.13	******	******	******	******	******	******	******	******	******	******	******	******
1600	360.	2.13	******	0.009	0.0053	0.0020	0.0375	0.0011	0.0016	******	1.06	0.0044	0.0011	******

EC -251
FORMALDEHYDE + NOX
1977 NOV 17

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	HCHO PPM	N-C4 PPM	NEO-C5 PPM
930	-30.	******	******	******	******	******	.00574	.00741
1000	0.	0.000	0.080	0.033	0.113	0.193	.00563	.00759
1015	15.	0.024	0.036	0.067	0.103	******	******	******
1030	30.	0.056	0.020	0.077	0.098	******	******	******
1045	45.	0.090	0.015	0.073	0.088	******	******	******
1100	60.	0.120	0.013	0.069	0.082	0.162	******	******
1115	75.	0.144	0.012	0.065	0.077	******	******	******
1130	90.	0.166	0.011	0.059	0.070	******	******	******
1145	105.	0.183	0.010	0.057	0.066	******	******	******
1200	120.	0.198	0.010	0.053	0.062	0.087	******	******
1215	135.	0.210	0.009	0.049	0.058	******	******	******
1230	150.	0.222	0.009	0.046	0.054	******	******	******
1245	165.	0.232	0.008	0.043	0.051	******	******	******
1300	180.	0.239	0.008	0.040	0.048	0.034	.00408	.00661
1315	195.	0.247	0.008	0.037	0.045	******	******	******
1330	210.	0.252	0.008	0.036	0.044	******	******	******
1345	225.	0.257	0.008	0.036	0.042	******	******	******
1400	240.	0.259	0.009	0.033	0.042	0.026	******	******
1415	255.	0.261	0.009	0.030	0.039	******	******	******
1430	270.	0.264	0.008	0.030	0.037	******	******	******
1445	285.	0.266	0.008	0.030	0.037	******	******	******
1500	300.	0.266	0.008	0.030	0.038	0.024	******	******
1515	315.	0.269	0.008	0.028	0.036	******	******	******
1530	330.	0.269	0.008	0.027	0.035	******	******	******
1545	345.	0.271	0.009	0.026	0.035	******	******	******
1600	360.	0.271	0.008	0.026	0.034	0.017	******	******

EC -251
FORNALDEHYDE + NOX
1977 NOV 17

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.240
430.	2.372
403.	1.989
380.	1.648
370.	1.417
360.	1.171
350.	1.000
340.	0.772
330.	0.530
320.	0.288
310.	0.110
300.	0.016
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.694 L/MIN

31 GC SAMPLES TAKEN

EC -251
FORMALDEHYDE + NOX
1977 NOV 17

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT NO3 PPM	TOT N PPM	H2O PPM	HCTOT PPMC
930	-30.	******	******	******	******	******	0.280
1000	0.	0.033	0.113	0.000	0.113	18258.	0.283
1015	15.	0.068	0.104	0.001	0.104	19028.	******
1030	30.	0.078	0.098	0.001	0.098	19813.	******
1045	45.	0.074	0.089	0.001	0.090	20631.	******
1100	60.	0.071	0.084	0.002	0.084	21577.	******
1115	75.	0.067	0.079	0.002	0.079	22338.	******
1130	90.	0.061	0.072	0.002	0.073	23080.	******
1145	105.	0.060	0.069	0.003	0.069	23260.	******
1200	120.	0.056	0.066	0.004	0.066	23844.	******
1215	135.	0.053	0.062	0.004	0.062	23844.	******
1230	150.	0.050	0.058	0.005	0.059	23660.	******
1245	165.	0.048	0.056	0.005	0.056	23477.	******
1300	180.	0.045	0.053	0.006	0.053	23660.	0.244
1315	195.	0.043	0.051	0.006	0.051	23879.	******
1330	210.	0.042	0.050	0.006	0.050	23694.	******
1345	225.	0.042	0.048	0.006	0.050	23694.	******
1400	240.	0.040	0.048	0.007	0.048	23879.	******
1415	255.	0.038	0.046	0.007	0.046	23879.	******
1430	270.	0.038	0.045	0.008	0.046	23477.	******
1445	285.	0.038	0.045	0.008	0.046	23660.	******
1500	300.	0.038	0.046	0.008	0.046	23477.	******
1515	315.	0.037	0.045	0.009	0.045	23477.	******
1530	330.	0.036	0.044	0.009	0.044	24029.	******
1545	345.	0.034	0.043	0.009	0.044	23477.	******
1600	360.	0.035	0.043	0.009	0.043	23844.	0.231

EC -252
FORMALDEHYDE + NOX
1977 NOV 18

BEGIN IRRADIATION 0945, 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
0817: 0.428 TORR HCHO IN 5.467 L BULB EXPANDED INTO EC THROUGH DISPERSER TUBE
CALCULATED HCHO INJECTED = 0.564 PPM IN EC
N-C4 AND NEO-C5 ADDED AS TRACERS FOR OH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
PAN LESS THAN 1 PPB AT 1545
DASIBI 1212, TECO 148, BECKMAN 6800, BRADY 291 USED
FACTOR: CO 1.6/.277

T=0 AT 945 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.6
REL HUM	%	AVERAGE	50.24
SSPOWER	KW	AVERAGE	20.18
RADIOM	MW/CM2	AVERAGE	0.229
H2O	PPM	AVERAGE	2.181E 04
NO	PPM	INIT COND	0.392
NO2-CORR	PPM	INIT COND	0.103
HCHO	PPM	INIT COND	0.359
N-C4	PPM	INIT COND	0.006
NEO-C5	PPM	INIT COND	0.008
CO	PPM	INIT COND	0.756
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	1.190
ETHANE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.005
ACETYLEN	PPM	INIT COND	0.005
PROPANE	PPM	INIT COND	0.006

* ASSIGNED INITIAL CONDITION

EC -252
FORMALDEHYDE + NOX
1977 NOV 18

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.209
430.	2.379
403.	1.983
380.	1.647
370.	1.413
360.	1.170
350.	1.000
340.	0.779
330.	0.527
320.	0.290
310.	0.111
300.	0.016
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.693 L/MIN

30 GC SAMPLES TAKEN

EC -252
FORMALDEHYDE + NOX
1977 NOV 18

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	HCHO PPM	N-C4 PPM	NEO-C5 PPM
845	-60.	******	******	******	******	******	.00004	******
935	-10.	******	******	******	******	******	.00585	.00718
945	0.	0.000	0.392	0.103	0.493	0.359	.00615	.00753
1000	15.	0.000	0.352	0.133	0.485	******	******	******
1015	30.	0.000	0.327	0.150	0.479	******	******	******
1030	45.	0.000	0.292	0.176	0.468	******	******	******
1045	60.	0.000	0.265	0.192	0.456	0.286	******	******
1100	75.	0.000	0.238	0.209	0.445	******	******	******
1115	90.	0.002	0.221	0.213	0.432	******	******	******
1130	105.	0.000	0.205	0.219	0.423	******	******	******
1145	120.	0.002	0.188	0.225	0.413	0.121	******	******
1200	135.	0.002	0.178	0.228	0.405	******	******	******
1215	150.	0.007	0.167	0.231	0.398	******	******	******
1230	165.	0.010	0.158	0.232	0.388	******	******	******
1245	180.	0.010	0.149	0.231	0.380	0.141	.00499	.00669
1300	195.	0.010	0.142	0.230	0.370	******	******	******
1315	210.	0.012	0.133	0.231	0.364	******	******	******
1330	225.	0.015	0.127	0.232	0.358	******	******	******
1345	240.	0.015	0.122	0.230	0.349	0.103	******	******
1400	255.	0.020	0.117	0.226	0.342	******	******	******
1415	270.	0.017	0.110	0.227	0.336	******	******	******
1430	285.	0.020	0.107	0.222	0.330	******	******	******
1445	300.	0.017	0.103	0.221	0.322	0.099	******	******
1500	315.	0.022	0.099	0.220	0.318	******	******	******
1515	330.	0.022	0.096	0.216	0.313	******	******	******
1530	345.	0.020	0.093	0.215	0.305	******	******	******
1545	360.	0.024	0.090	0.213	0.302	0.084	.00448	.00616

EC -252
FORMALDEHYDE + NOX
1977 NOV 18

CLOCK TIME	ELAPSED T(MIN)	CO PPM	H2O2 PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)
845	-60.	******	******	0.0007	0.0001	0.0008	0.0000	0.0002	******	1.21	0.0048	0.0030	0.0050	0.0048
935	-10.	******	******	******	******	******	******	******	******	******	******	******	******	******
945	0.	0.76	0.0	0.0012	0.0003	0.0015	0.0001	0.0002	0.0000	1.19	0.0050	0.0029	0.0046	******
1000	15.	0.80	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	0.81	0.0	******	******	******	******	******	******	******	******	******	******	******
1030	45.	0.87	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.88	******	******	******	******	******	******	******	******	******	******	******	******
1100	75.	0.94	******	******	******	******	******	******	******	******	******	******	******	******
1115	90.	0.97	0.0	******	******	******	******	******	******	******	******	******	******	******
1130	105.	1.00	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	1.04	******	******	******	******	******	******	******	******	******	******	******	******
1200	135.	1.07	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	1.11	0.0	******	******	******	******	******	******	******	******	******	******	******
1230	165.	1.12	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	1.14	******	0.0030	0.0006	0.0056	0.0002	0.0020	******	1.21	0.0048	0.0020	0.0046	******
1300	195.	1.17	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	1.19	0.0	******	******	******	******	******	******	******	******	******	******	******
1330	225.	1.22	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	1.21	******	******	******	******	******	******	******	******	******	******	******	******
1400	255.	1.22	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	1.29	0.0	******	******	******	******	******	******	******	******	******	******	******
1430	285.	1.29	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	1.29	******	******	******	******	******	******	******	******	******	******	******	******
1500	315.	1.31	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	1.35	0.0	******	******	******	******	******	******	******	******	******	******	******
1530	345.	1.38	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	1.38	******	0.0050	0.0009	0.0098	0.0004	0.0018	0.0001	1.19	0.0049	0.0020	0.0047	******

EC -252
FORMALDEHYDE + NOX
1977 NOV 18

CLOCK TIME	ELAPSED T(MIN)	PROPANE PPM	PROPENE PPM	I-C4 PPM
845	-60.	0.0060	C.000	0.0001
935	-10.	******	******	******
945	0.	0.0060	0.000	0.0000
1000	15.	******	******	******
1015	30.	******	******	******
1030	45.	******	******	******
1045	60.	******	******	******
1100	75.	******	******	******
1115	90.	******	******	******
1130	105.	******	******	******
1145	120.	******	******	******
1200	135.	******	******	******
1215	150.	******	******	******
1230	165.	******	******	******
1245	180.	0.0054	0.000	0.0001
1300	195.	******	******	******
1315	210.	******	******	******
1330	225.	******	******	******
1345	240.	******	******	******
1400	255.	******	******	******
1415	270.	******	******	******
1430	285.	******	******	******
1445	300.	******	******	******
1500	315.	******	******	******
1515	330.	******	******	******
1530	345.	******	******	******
1545	360.	0.0055	C.000	0.0000

EC -252
FORMALDEHYDE + NOX
1977 NOV 18

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM MW/CM2	HCHO VOL L	H2O2 VOL PPM
845	-60.	******	******	******	******	******	******
935	-10.	******	******	******	******	******	******
945	0.	84.3	45.0	20.23	0.217	10.00	30.0
1000	15.	85.2	47.0	******	0.234	******	******
1015	30.	85.2	49.5	******	0.232	******	30.0
1030	45.	85.5	51.0	******	0.227	******	******
1045	60.	86.2	52.0	19.84	0.225	20.00	******
1100	75.	86.5	52.5	******	******	******	******
1115	90.	87.0	52.5	******	******	******	30.0
1130	105.	86.7	52.5	******	******	******	******
1145	120.	87.2	52.5	19.80	0.227	20.00	******
1200	135.	87.2	52.5	******	******	******	******
1215	150.	87.4	52.5	******	******	******	30.0
1230	165.	87.9	52.5	******	******	******	******
1245	180.	87.7	52.5	20.16	0.234	20.00	******
1300	195.	87.4	52.5	******	0.227	******	******
1315	210.	87.9	52.0	******	******	******	30.0
1330	225.	87.4	52.5	******	******	******	******
1345	240.	87.7	52.5	20.02	0.227	20.00	******
1400	255.	88.4	52.5	******	******	******	******
1415	270.	87.9	52.0	******	******	******	30.0
1430	285.	87.9	52.5	******	******	******	******
1445	300.	87.7	52.0	20.48	0.237	20.00	******
1500	315.	87.9	52.0	******	0.227	******	******
1515	330.	88.2	52.0	******	******	******	30.0
1530	345.	88.2	52.0	******	******	******	******
1545	360.	88.2	52.0	20.70	******	20.00	******

EC -252
FORMALDEHYDE + NOX
1977 NOV 18

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT N PPM	H2O PPM	HCTOT PPMC
845	-60.	******	******	******	******	0.435
935	-10.	******	******	******	******	0.438
945	0.	0.103	0.493	0.495	17817.	0.440
1000	15.	0.133	0.485	0.485	19201.	******
1015	30.	0.150	0.479	0.478	20222.	******
1030	45.	0.176	0.468	0.468	20998.	******
1045	60.	0.192	0.456	0.457	21916.	******
1100	75.	0.209	0.445	0.447	22300.	******
1115	90.	0.213	0.432	0.434	22649.	******
1130	105.	0.219	0.423	0.424	22473.	******
1145	120.	0.225	0.413	0.413	22825.	******
1200	135.	0.228	0.405	0.407	22825.	******
1215	150.	0.231	0.398	0.398	23002.	******
1230	165.	0.232	0.388	0.390	23361.	******
1245	180.	0.231	0.380	0.380	23181.	0.239
1300	195.	0.230	0.370	0.371	23002.	******
1315	210.	0.231	0.364	0.364	23139.	******
1330	225.	0.232	0.358	0.359	23002.	******
1345	240.	0.230	0.349	0.352	23181.	******
1400	255.	0.226	0.342	0.343	23725.	******
1415	270.	0.227	0.336	0.337	23139.	******
1430	285.	0.222	0.330	0.330	23361.	******
1445	300.	0.221	0.322	0.324	22961.	******
1500	315.	0.220	0.318	0.319	23139.	******
1515	330.	0.216	0.313	0.313	23318.	******
1530	345.	0.215	0.305	0.308	23318.	******
1545	360.	0.213	0.302	0.303	23318.	0.196

EC -253
ACETALDEHYDE
1977 NOV 21

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
0800: 0.392 TORR ACETALDEHYDE IN 5.467 L BULB EXPANDED INTO EC
THROUGH DISPERSER TUBE
CALCULATED ACETALDEHYDE INJECTED = 0.517 PPM IN EC
N-C4 AND NEO-C5 ADDED AS TRACERS FOR CH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
DASIBI 1212, TECO 148, BECKMAN 6800, BRADY 291 USED
FACTORS: CO 1.6/.277

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.4
REL HUM	%	AVERAGE	52.68
SSPOWER	KW	AVERAGE	20.52
RADIOM	MW/CM2	AVERAGE	0.230
H2O	PPM	AVERAGE	2.253E 04
NO	PPM	INIT COND	0.011
NO2-CORR	PPM	INIT COND	0.009
ACETALD	PPM	INIT COND	0.546
N-C4	PPM	INIT COND	0.006
NEO-C5	PPM	INIT COND	0.008
CO	PPM	INIT COND	2.110

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	3.200
430.	2.387
403.	1.993
380.	1.650
370.	1.429
360.	1.165
350.	1.000
340.	0.776
330.	0.527
320.	0.285
310.	0.109
300.	0.016
290.	0.000
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.839 L/MIN

40 GC SAMPLES TAKEN

EC -253
ACETALDEHYDE
1977 NOV 21

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ACETALD PPM	N-C4 PPM	NEO-C5 PPM	CO PPM	H2O2 PPM	PAN PPM	HCHO PPM
930	0.	0.000	0.011	0.009	0.020	0.546	.00638	.00766	2.11	******	0.000	0.0
945	15.	0.002	0.009	0.009	0.019	******	******	******	2.11	0.0	******	******
1000	30.	0.007	0.009	0.008	0.017	******	.00624	.00747	2.14	******	0.006	******
1015	45.	0.012	0.009	0.006	0.015	******	******	******	2.14	******	******	******
1030	60.	0.020	0.012	0.003	0.015	0.535	.00603	.00724	2.14	******	0.011	0.020
1045	75.	0.022	0.009	0.006	0.014	******	******	******	2.15	******	******	******
1100	90.	0.029	0.011	0.003	0.014	0.530	.00602	.00729	2.17	******	0.015	******
1115	105.	0.037	0.009	0.005	0.013	******	******	******	2.18	******	******	******
1130	120.	0.042	0.009	0.003	0.013	0.449	.00602	.00721	2.19	******	0.018	0.025
1145	135.	0.049	0.009	0.004	0.013	******	******	******	2.19	******	******	******
1200	150.	0.054	0.008	0.005	0.013	******	.00592	.00715	2.21	0.003	0.021	******
1215	165.	0.061	0.008	0.004	0.012	******	******	******	2.24	******	******	******
1230	180.	0.066	0.008	0.003	0.011	0.363	.00579	.00704	2.24	******	0.026	0.038
1245	195.	0.071	0.008	0.002	0.012	******	******	******	2.26	******	******	******
1300	210.	0.078	0.008	0.003	0.011	0.478	.00567	.00696	2.28	0.007	0.028	******
1315	225.	0.083	0.013	0.003	0.016	******	******	******	2.28	******	******	******
1330	240.	0.088	0.008	0.004	0.012	0.415	.00569	.00696	2.31	******	0.030	0.040
1345	255.	0.095	0.008	0.004	0.012	******	******	******	2.34	******	******	******
1400	270.	0.100	0.007	0.006	0.013	0.333	.00547	.00670	2.32	0.007	0.031	******
1415	285.	0.105	0.007	0.005	0.012	******	******	******	2.34	******	******	******
1430	300.	0.110	0.007	0.004	0.012	0.334	.00550	.00677	2.36	******	0.035	0.043
1445	315.	0.117	0.007	0.005	0.012	******	******	******	2.39	******	******	******
1500	330.	0.122	0.007	0.006	0.013	0.307	.00537	.00668	2.39	0.004	0.036	******
1515	345.	0.130	0.008	0.004	0.012	******	******	******	2.39	******	******	******
1530	360.	0.134	0.007	0.004	0.012	0.299	.00531	.00642	2.39	******	0.040	0.052

EC -253
ACETALDEHYDE
1977 NOV 21

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	H2O2 VOL PPM
930	0.	84.0	45.5	20.18	0.225	20.00	******
945	15.	84.5	47.5	******	0.234	******	30.0
1000	30.	84.5	50.0	******	0.227	******	******
1015	45.	85.0	52.0	******	******	******	******
1030	60.	85.7	53.0	19.71	0.222	20.00	******
1045	75.	86.0	53.5	******	******	******	******
1100	90.	86.5	53.5	******	******	******	******
1115	105.	86.5	54.0	******	******	******	******
1130	120.	87.0	54.0	20.70	0.230	20.00	******
1145	135.	87.0	54.0	******	******	******	******
1200	150.	87.2	54.0	******	******	******	30.0
1215	165.	87.2	54.0	******	******	******	******
1230	180.	87.2	54.0	20.48	0.230	20.00	******
1245	195.	87.4	54.5	******	******	******	******
1300	210.	87.2	54.5	******	******	******	30.0
1315	225.	87.2	54.0	******	******	******	******
1330	240.	87.4	54.5	20.34	0.230	20.00	******
1345	255.	87.4	54.5	******	0.227	******	******
1400	270.	87.4	54.5	******	0.227	******	30.0
1415	285.	87.2	54.5	20.55	0.220	******	******
1430	300.	87.7	54.5	20.98	0.234	20.00	******
1445	315.	88.2	54.0	******	******	******	******
1500	330.	87.9	54.0	******	******	******	30.0
1515	345.	87.9	54.0	******	******	******	******
1530	360.	88.2	54.0	21.25	0.242	20.00	******

EC -253
ACETALDEHYDE
1977 NOV 21

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT NO3 PPM	TOT N PPM	H2O PPM	HCTOT PPMC
930	0.	0.009	0.021	0.000	0.021	17875.	1.156
945	15.	0.012	0.022	0.003	0.022	18955.	******
1000	30.	0.014	0.023	0.006	0.023	19953.	1.166
1015	45.	0.015	0.024	0.008	0.024	21078.	******
1030	60.	0.014	0.026	0.011	0.026	21992.	1.173
1045	75.	0.018	0.027	0.013	0.027	22374.	******
1100	90.	0.018	0.029	0.015	0.029	22724.	1.174
1115	105.	0.021	0.030	0.017	0.030	22937.	******
1130	120.	0.021	0.031	0.018	0.030	23296.	1.022
1145	135.	0.024	0.033	0.020	0.033	23296.	******
1200	150.	0.026	0.034	0.021	0.034	23477.	0.947
1215	165.	0.027	0.035	0.024	0.035	23477.	******
1230	180.	0.028	0.037	0.026	0.037	23477.	0.875
1245	195.	0.028	0.039	0.027	0.037	23879.	******
1300	210.	0.031	0.039	0.028	0.039	23694.	1.110
1315	225.	0.032	0.045	0.029	0.045	23477.	******
1330	240.	0.034	0.042	0.030	0.042	23879.	0.989
1345	255.	0.035	0.043	0.031	0.043	23879.	******
1400	270.	0.037	0.044	0.031	0.044	23879.	0.827
1415	285.	0.038	0.045	0.033	0.045	23694.	******
1430	300.	0.040	0.047	0.035	0.046	24065.	0.840
1445	315.	0.041	0.048	0.035	0.048	24215.	******
1500	330.	0.042	0.048	0.036	0.048	24029.	0.789
1515	345.	0.042	0.050	0.038	0.050	24029.	******
1530	360.	0.044	0.051	0.040	0.051	24215.	0.783

EC -254
ACETALDEHYDE + NOX
1977 NOV 22

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
0900: 0.385 TORR ACETALDEHYDE IN 5.467 L BULB EXPANDED INTO THE EC
CALCULATED ACETALDEHYDE INJECTED = 0.508 PPM.
ASSUMED TO BE INITIAL CONCENTRATION
N-C4 AND NEO-C5 ADDED AS TRACERS FOR DH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
DASIBI 1212, TECO 148, BECKMAN 6800 BRADY 291 USED
FACTORS: CO 1.6/.277

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.7
REL HUM	%	AVERAGE	47.93
SSPOWER	KW	AVERAGE	20.28
RADIUM	MW/CM2	AVERAGE	0.230
H2O	PPM	AVERAGE	2.082E 04
NO	PPM	INIT COND	0.085
NO2-CORR	PPM	INIT COND	0.027
ACETALD	PPM	INIT COND	0.508 *
N-C4	PPM	INIT COND	0.007
NEO-C5	PPM	INIT COND	0.007
CO	PPM	INIT COND	2.701
HCHO	PPM	INIT COND	0.012

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	3.239
430.	2.363
403.	1.990
380.	1.645
370.	1.430
360.	1.162
350.	1.000
340.	0.768
330.	0.519
320.	0.286
310.	0.108
300.	0.016
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.839 L/MIN

40 GC SAMPLES TAKEN

EC -254
ACETALDEHYDE + NOX
1977 NOV 22

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ACETALD PPM	N-C4 PPM	NEO-C5 PPM	CO PPM	H2O2 PPM	PAN PPM	HCHO PPM
930	0.	0.000	0.085	0.027	0.112	0.472	.00668	.00733	2.70	******	0.000	0.012
945	15.	0.005	0.054	0.053	0.104	******	******	******	2.66	0.0	******	******
1000	30.	0.020	0.041	0.058	0.098	0.504	.00658	.00744	2.64	******	0.008	******
1015	45.	0.029	0.030	0.064	0.093	******	******	******	2.47	******	******	******
1030	60.	0.039	0.024	0.068	0.092	0.407	.00644	.00730	2.69	******	0.015	0.006
1045	75.	0.051	0.021	0.066	0.087	******	******	******	2.67	******	******	******
1100	90.	0.066	0.018	0.065	0.082	0.468	.00649	.00719	2.70	0.003	0.023	******
1115	105.	0.081	0.016	0.065	0.079	******	******	******	2.70	******	******	******
1130	120.	0.093	0.014	0.065	0.078	0.346	.00632	.00719	2.71	******	0.026	0.006
1145	135.	0.105	0.013	0.061	0.073	******	******	******	2.74	******	******	******
1200	150.	0.120	0.012	0.059	0.070	0.388	.00632	.00694	2.76	0.001	0.035	******
1215	165.	0.130	0.010	0.053	0.062	******	******	******	2.76	******	******	******
1230	180.	0.144	0.011	0.047	0.058	0.290	.00615	.00683	2.77	******	0.045	0.022
1245	195.	0.156	0.009	0.045	0.054	******	******	******	2.79	******	******	******
1300	210.	0.166	0.009	0.041	0.050	0.322	.00609	.00703	2.80	0.004	0.051	******
1315	225.	0.178	0.008	0.038	0.046	******	******	******	2.83	******	******	******
1330	240.	0.191	0.008	0.034	0.042	0.263	.00599	.00673	2.83	******	0.056	0.019
1345	255.	0.200	0.008	0.032	0.039	******	******	******	2.86	******	******	******
1400	270.	0.210	0.008	0.028	0.035	0.245	.00579	.00661	2.87	0.008	0.064	******
1415	285.	0.220	0.008	0.025	0.032	******	******	******	2.88	******	******	******
1430	300.	0.232	0.008	0.023	0.030	0.235	.00570	.00657	2.87	******	0.068	0.026
1445	315.	0.239	0.007	0.022	0.028	******	******	******	2.90	******	******	******
1500	330.	0.247	0.007	0.020	0.026	0.215	.00559	.00658	2.90	0.004	0.071	******
1515	345.	0.254	0.006	0.021	0.027	******	******	******	2.91	******	******	******
1530	360.	0.264	0.006	0.021	0.027	0.233	.00547	.00630	2.95	******	0.070	0.037

EC -254
ACETALDEHYDE + NOX
1977 NOV 22

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	H2O2 VOL PPM
930	0.	83.0	42.0	19.57	0.234	20.00	******
945	15.	85.2	43.5	******	0.227	******	30.0
1000	30.	85.5	45.5	19.80	0.227	******	******
1015	45.	85.5	47.0	******	******	******	******
1030	60.	87.0	46.0	20.02	0.230	20.00	******
1045	75.	87.2	46.0	20.33	0.232	******	******
1100	90.	87.7	48.5	******	******	******	30.0
1115	105.	87.9	48.5	******	******	******	******
1130	120.	88.2	48.5	20.66	0.239	20.00	******
1145	135.	88.2	48.5	******	******	******	******
1200	150.	88.4	48.5	******	******	******	30.0
1215	165.	88.2	48.5	******	******	******	******
1230	180.	88.7	48.5	20.98	0.230	20.00	******
1245	195.	88.4	48.5	******	******	******	******
1300	210.	88.7	49.0	******	******	******	30.0
1315	225.	88.7	49.0	******	******	******	******
1330	240.	88.7	49.0	20.20	0.232	20.00	******
1345	255.	88.4	49.0	******	******	******	******
1400	270.	88.4	49.0	******	0.234	******	30.0
1415	285.	88.2	49.0	******	******	******	******
1430	300.	88.7	49.0	20.48	0.230	20.00	******
1445	315.	87.9	49.0	******	******	******	******
1500	330.	88.4	49.0	******	******	******	30.0
1515	345.	88.2	49.0	******	******	******	******
1530	360.	88.2	49.5	20.48	0.230	20.00	******

EC -255
FORMALDEHYDE
1977 NOV 23

BEGIN IRRADIATION 0900: 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
0731: 0.387 TORR HCHO IN 5.467 L BULB EXPANDED INTO THE EC
CALCULATED FORMALDEHYDE INJECTED = 0.510 PPM IN EC
N-C4 AND NEO-C5 ADDED AS TRACERS FOR OH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
DASIBI 1212, TECO 14B, BECKMAN 6800, BRADY 291 USED
CO FACTORS: 1.6/.273

T=0 AT 900 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.5
REL HUM	%	AVERAGE	44.61
SSPOWER	KW	AVERAGE	20.55
RADICM	MW/CM2	AVERAGE	0.229
H2O	PPM	AVERAGE	1.955E 04
NO	PPM	INIT COND	0.006
NO2-CORR	PPM	INIT COND	0.010
HCHO	PPM	INIT COND	0.330
N-C4	PPM	INIT COND	0.007
NEO-C5	PPM	INIT COND	0.007
CO	PPM	INIT COND	2.202
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001
MEK	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.223
ETHANE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.005
ACETYLEN	PPM	INIT COND	0.008
ACETYLEN	PPM	INIT COND	0.008
PROPANE	PPM	INIT COND	0.005

* ASSIGNED INITIAL CONDITION

EC -255
FORMALDEHYDE
1977 NOV 23

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	3.284
430.	2.421
403.	2.012
380.	1.686
370.	1.445
360.	1.190
350.	1.000
340.	0.773
330.	0.525
320.	0.286
310.	0.109
300.	0.016
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.693 L/MIN

30 GC SAMPLES TAKEN

EC -255
FORMALDEHYDE
1977 NOV 23

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	HCHO PPM	N-C4 PPM	NEO-C5 PPM
752	-68.	******	******	******	******	******	.00012	******
840	-20.	******	******	******	******	******	.00700	.00752
900	0.	0.000	0.006	0.010	0.016	0.330	.00694	.00748
915	15.	0.010	0.006	0.014	0.020	******	******	******
930	30.	0.022	0.006	0.011	0.017	******	******	******
945	45.	0.039	0.006	0.013	0.019	******	******	******
1000	60.	0.056	0.006	0.013	0.019	0.262	******	******
1015	75.	0.071	0.006	0.014	0.020	******	******	******
1030	90.	0.086	0.006	0.013	0.020	******	******	******
1045	105.	0.095	0.006	0.015	0.020	******	******	******
1100	120.	0.108	0.006	0.015	0.021	0.171	******	******
1115	135.	0.120	0.006	0.015	0.021	******	******	******
1130	150.	0.130	0.006	0.015	0.021	******	******	******
1145	165.	0.137	0.006	0.016	0.021	******	******	******
1200	180.	0.147	0.006	0.016	0.022	0.111	.00575	.00678
1215	195.	0.156	0.006	0.016	0.022	******	******	******
1230	210.	0.164	0.006	0.016	0.022	******	******	******
1245	225.	0.169	0.005	0.017	0.022	******	******	******
1300	240.	0.176	0.005	0.016	0.022	0.053	******	******
1315	255.	0.178	0.005	0.016	0.022	******	******	******
1330	270.	0.183	0.005	0.017	0.022	******	******	******
1345	285.	0.186	0.006	0.016	0.023	******	******	******
1400	300.	0.193	0.005	0.017	0.023	0.038	******	******
1415	315.	0.193	0.005	0.017	0.022	******	******	******
1430	330.	0.195	0.005	0.018	0.023	******	******	******
1445	345.	0.200	0.006	0.017	0.023	******	******	******
1500	360.	0.203	0.006	0.018	0.024	0.038	.00463	.00603

EC -255
FORMALDEHYDE
1977 NOV 23

CLOCK TIME	ELAPSED T(MIN)	CO PPM	H2O2 PPM	PAN PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	METHANE PPM	ETHANE PPM	ETHENE PPM
752	-68.	******	******	******	0.0005	0.0001	0.0005	0.0000	0.0001	0.0000	1.22	0.0051	0.0047
840	-20.	******	******	******	******	******	******	******	******	******	******	******	******
900	0.	2.20	0.0	0.000	0.0011	0.0001	0.0011	0.0001	0.0006	0.0000	1.22	0.0051	0.0048
915	15.	2.23	******	******	******	******	******	******	******	******	******	******	******
930	30.	2.23	0.008	0.000	******	******	******	******	******	******	******	******	******
945	45.	2.29	******	******	******	******	******	******	******	******	******	******	******
1000	60.	2.34	******	0.000	******	******	******	******	******	******	******	******	******
1015	75.	2.33	******	******	******	******	******	******	******	******	******	******	******
1030	90.	2.34	0.010	0.001	******	******	******	******	******	******	******	******	******
1045	105.	2.37	******	******	******	******	******	******	******	******	******	******	******
1100	120.	2.45	******	0.002	******	******	******	******	******	******	******	******	******
1115	135.	2.43	******	******	******	******	******	******	******	******	******	******	******
1130	150.	2.50	0.009	0.002	******	******	******	******	******	******	******	******	******
1145	165.	2.47	******	******	******	******	******	******	******	******	******	******	******
1200	180.	2.55	******	0.002	0.0040	0.0014	0.0116	0.0006	0.0022	0.0000	1.24	0.0052	0.0032
1215	195.	2.53	******	******	******	******	******	******	******	******	******	******	******
1230	210.	2.53	0.010	0.003	******	******	******	******	******	******	******	******	******
1245	225.	2.59	******	******	******	******	******	******	******	******	******	******	******
1300	240.	2.60	******	******	******	******	******	******	******	******	******	******	******
1315	255.	2.63	******	0.004	******	******	******	******	******	******	******	******	******
1330	270.	2.65	0.011	0.004	******	******	******	******	******	******	******	******	******
1345	285.	2.66	******	******	******	******	******	******	******	******	******	******	******
1400	300.	2.69	******	0.005	******	******	******	******	******	******	******	******	******
1415	315.	2.70	******	******	******	******	******	******	******	******	******	******	******
1430	330.	2.69	0.008	0.005	******	******	******	******	******	******	******	******	******
1445	345.	2.72	******	******	******	******	******	******	******	******	******	******	******
1500	360.	2.73	******	0.006	0.0047	0.0016	0.0283	0.0007	0.0019	0.0001	1.26	0.0053	0.0022

EC -255
FORMALDEHYDE
1977 NOV 23

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM
752	-68.	0.0080	0.0078	0.0051	0.000	0.0000
840	-20.	******	******	******	******	******
900	0.	0.0079	******	0.0051	0.000	0.0000
915	15.	******	******	******	******	******
930	30.	******	******	******	******	******
945	45.	******	******	******	******	******
1000	60.	******	******	******	******	******
1015	75.	******	******	******	******	******
1030	90.	******	******	******	******	******
1045	105.	******	******	******	******	******
1100	120.	******	******	******	******	******
1115	135.	******	******	******	******	******
1130	150.	******	******	******	******	******
1145	165.	******	******	******	******	******
1200	180.	0.0076	******	0.0048	0.000	0.0001
1215	195.	******	******	******	******	******
1230	210.	******	******	******	******	******
1245	225.	******	******	******	******	******
1300	240.	******	******	******	******	******
1315	255.	******	******	******	******	******
1330	270.	******	******	******	******	******
1345	285.	******	******	******	******	******
1400	300.	******	******	******	******	******
1415	315.	******	******	******	******	******
1430	330.	******	******	******	******	******
1445	345.	******	******	******	******	******
1500	360.	0.0072	******	0.0045	0.000	0.0001

EC -255
FORMALDEHYDE
1977 NOV 23

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	H2O2 VOL PPM
752	-68.	******	******	******	******	******	******
840	-20.	******	******	******	******	******	******
900	0.	84.3	40.5	19.96	0.225	10.00	30.0
915	15.	85.2	42.5	******	0.227	******	******
930	30.	85.0	44.5	******	0.225	******	30.0
945	45.	85.2	46.5	20.46	0.220	******	******
1000	60.	86.2	47.5	20.46	0.232	20.00	******
1015	75.	86.2	48.0	******	******	******	******
1030	90.	86.7	48.0	******	******	******	30.0
1045	105.	87.0	48.5	******	******	******	******
1100	120.	87.2	48.5	20.48	0.227	20.00	******
1115	135.	87.2	48.5	******	0.230	******	******
1130	150.	87.2	48.5	******	0.230	******	30.0
1145	165.	87.4	48.5	******	******	******	******
1200	180.	87.9	49.0	21.16	0.239	20.00	******
1215	195.	87.9	48.5	******	******	******	******
1230	210.	87.9	48.5	******	******	******	30.0
1245	225.	87.2	48.5	******	******	******	******
1300	240.	87.2	49.0	20.52	0.234	20.00	******
1315	255.	87.4	49.0	******	0.230	******	******
1330	270.	87.9	49.0	******	0.227	******	30.0
1345	285.	87.7	49.0	******	******	******	******
1400	300.	87.4	48.5	20.79	0.232	20.00	******
1415	315.	87.4	48.5	******	******	******	******
1430	330.	87.4	48.5	******	******	******	30.0
1445	345.	87.7	48.5	******	******	******	******
1500	360.	87.9	49.0	20.56	0.232	20.00	******

EC -255
FORMALDEHYDE
1977 NOV 23

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT NO3 PPM	TOT N PPM	H2O PPM	HCTOT PPMC
752	-68.	******	******	******	******	******	0.414
840	-20.	******	******	******	******	******	0.418
900	0.	0.010	0.016	0.000	0.017	16036.	0.419
915	15.	0.014	0.020	0.000	0.021	17362.	******
930	30.	0.012	0.018	0.000	0.018	18038.	******
945	45.	0.013	0.019	0.000	0.019	18996.	******
1000	60.	0.014	0.020	0.000	0.020	20020.	******
1015	75.	0.014	0.021	0.001	0.021	20230.	******
1030	90.	0.014	0.021	0.001	0.020	20547.	******
1045	105.	0.016	0.022	0.001	0.022	20923.	******
1100	120.	0.016	0.022	0.002	0.022	21086.	******
1115	135.	0.017	0.023	0.002	0.023	21086.	******
1130	150.	0.017	0.023	0.002	0.023	21086.	******
1145	165.	0.018	0.023	0.002	0.024	21250.	******
1200	180.	0.019	0.024	0.002	0.024	21804.	0.245
1215	195.	0.019	0.025	0.003	0.025	21581.	******
1230	210.	0.019	0.025	0.003	0.025	21581.	******
1245	225.	0.020	0.026	0.004	0.026	21086.	******
1300	240.	0.020	0.025	0.004	0.026	21303.	******
1315	255.	0.020	0.026	0.004	0.026	21469.	******
1330	270.	0.021	0.026	0.004	0.026	21804.	******
1345	285.	0.021	0.027	0.004	0.027	21636.	******
1400	300.	0.022	0.027	0.005	0.027	21250.	******
1415	315.	0.022	0.027	0.005	0.028	21250.	******
1430	330.	0.023	0.029	0.005	0.029	21250.	******
1445	345.	0.023	0.029	0.006	0.029	21415.	******
1500	360.	0.024	0.029	0.006	0.030	21804.	0.223

EC -256
PROPENE
1977 NOV 29

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
N-C4 AND NEO-C5 ADDED AS TRACERS FOR OH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
DASIBI 1212, TECO 148, BECKMAN 6800, BRADY 291 USED
CO FACTORS: CO 1.6/.320

T=0 AT 945 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	49.32
SSPOWER	KW	AVERAGE	20.72
RADIOM	MW/CM2	AVERAGE	0.232
H2O	PPM	AVERAGE	2.044E 04
NO	PPM	INIT COND	0.520
NO2-CORR	PPM	INIT COND	0.344
PROPENE	PPM	INIT COND	0.109
N-C4	PPM	INIT COND	0.007 *
NEO-C5	PPM	INIT COND	0.008
CO	PPM	INIT COND	2.616
HCHO	PPM	INIT COND	0.042
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	3.227
430.	2.379
403.	1.998
380.	1.651
370.	1.437
360.	1.182
350.	1.000
340.	0.755
330.	0.535
320.	0.293
310.	0.111
300.	0.016
290.	0.001
280.	0.0

KI=0.30 MIN-1

SAMPLING RATE = 1.697 L/MIN

35 GC SAMPLES TAKEN

EC -256
PROPENE
1977 NOV 29

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	N-C4 PPM	NEO-C5 PPM
945	0.	0.000	0.520	0.044	0.564	0.109	******	.00766
1000	15.	0.000	0.506	0.049	0.552	0.103	.00688	.00751
1015	30.	0.000	0.493	0.061	0.552	0.100	.00687	.00751
1030	45.	0.000	0.481	0.071	0.552	0.095	.00687	.00751
1045	60.	0.000	0.467	0.083	0.549	0.090	.00677	.00745
1100	75.	0.000	0.452	0.095	0.544	0.084	.00665	.00737
1115	90.	0.000	0.435	0.105	0.537	0.080	.00665	.00736
1130	105.	0.000	0.415	0.117	0.530	0.074	.00636	.00684
1145	120.	0.000	0.401	0.124	0.522	0.071	******	.00733
1200	135.	0.000	0.386	0.131	0.517	0.065	******	******
1215	150.	0.000	0.374	0.141	0.512	0.062	.00636	.00703
1230	165.	0.000	0.359	0.151	0.510	0.058	.00635	.00715
1245	180.	0.000	0.347	0.160	0.505	0.055	.00631	.00713
1300	195.	0.000	0.332	0.170	0.500	0.051	******	******
1315	210.	0.000	0.322	0.172	0.495	0.048	.00618	.00698
1330	225.	0.000	0.313	0.180	0.492	0.045	.00615	.00695
1345	240.	0.000	0.300	0.184	0.482	0.042	.00603	.00691
1400	255.	0.000	0.291	0.187	0.478	0.040	.00589	.00673
1415	270.	0.000	0.278	0.194	0.473	0.037	.00579	.00669
1430	285.	0.000	0.269	0.199	0.465	******	******	******
1445	300.	0.000	0.264	0.204	0.463	0.033	.00589	.00673
1500	315.	0.002	0.249	0.206	0.456	******	******	******
1515	330.	0.000	0.244	0.209	0.451	0.030	******	.00666
1530	345.	0.002	0.237	0.209	0.443	******	******	******
1545	360.	0.002	0.227	0.209	0.436	0.026	.00560	.00662

EC -256
PROPENE
1977 NOV 29

CLOCK TIME	ELAPSED T(MIN)	CO PPM	H2O2 PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM
945	0.	2.62	0.0	******	0.042	0.001	0.0002	0.0014
1000	15.	2.60	******	******	******	******	******	******
1015	30.	2.62	******	******	******	0.006	0.0001	0.0014
1030	45.	2.60	******	******	******	******	******	******
1045	60.	2.65	0.002	******	0.0	0.012	0.0002	0.0011
1100	75.	2.63	******	******	******	******	******	******
1115	90.	2.65	******	******	******	0.018	0.0002	0.0016
1130	105.	2.66	******	******	******	******	******	******
1145	120.	2.68	0.004	******	0.004	0.023	0.0001	0.0016
1200	135.	2.68	******	******	******	******	******	******
1215	150.	2.68	******	******	******	0.027	0.0003	0.0026
1230	165.	2.69	******	******	******	******	******	******
1245	180.	2.74	0.009	******	0.012	******	0.0003	0.0028
1300	195.	2.73	******	******	******	******	******	******
1315	210.	2.71	******	******	******	0.034	0.0002	0.0025
1330	225.	2.73	******	******	******	******	******	******
1345	240.	2.75	0.004	******	0.0	0.036	0.0002	0.0025
1400	255.	2.75	******	******	******	******	******	******
1415	270.	2.76	******	0.001	******	0.040	******	0.0047
1430	285.	2.77	******	******	******	******	******	******
1445	300.	2.80	0.002	0.001	0.002	0.036	0.0003	0.0036
1500	315.	2.80	******	******	******	******	******	******
1515	330.	2.82	******	0.001	******	0.037	0.0004	0.0049
1530	345.	2.82	******	******	******	******	******	******
1545	360.	2.85	******	0.001	0.004	0.037	0.0004	0.0047

EC -256
PROPENE
1977 NOV 29

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	H2O2 VOL PPM
945	0.	84.0	44.0	20.09	0.200	20.00	30.0
1000	15.	84.3	45.5	******	0.227	******	******
1015	30.	85.0	48.0	******	0.230	******	******
1030	45.	85.2	50.0	******	0.234	******	******
1045	60.	86.2	51.0	20.46	0.234	20.00	30.0
1100	75.	86.5	52.0	******	0.232	******	******
1115	90.	87.0	52.0	******	0.227	******	******
1130	105.	87.0	52.5	******	0.227	******	******
1145	120.	87.2	52.5	20.57	0.230	20.00	30.0
1200	135.	87.4	52.5	******	******	******	******
1215	150.	87.2	53.0	******	******	******	******
1230	165.	87.2	53.0	******	******	******	******
1245	180.	87.0	53.0	20.84	0.234	20.00	30.0
1300	195.	86.7	53.0	******	******	******	******
1315	210.	87.2	53.0	******	******	******	******
1330	225.	87.2	53.0	******	******	******	******
1345	240.	87.0	53.0	20.79	0.232	20.00	30.0
1400	255.	87.2	53.0	******	******	******	******
1415	270.	87.2	53.0	******	******	******	******
1430	285.	87.2	53.0	******	0.234	******	******
1445	300.	87.4	53.0	21.16	0.242	20.00	30.0
1500	315.	87.4	52.5	******	******	******	******
1515	330.	87.7	52.5	******	******	******	******
1530	345.	87.4	52.5	******	******	******	******
1545	360.	87.2	52.5	21.15	0.237	20.00	******

EC -257
FORMALDEHYDE + PROPENE
1977 NOV 30

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
0759: 0.415 TORR HCHO IN 5.467 L BULB EXPANDED INTO EC
CALCULATED HCHO INJECTED = 0.547 PPM IN EC
N-C4 AND NEO-C5 ADDED AS TRACERS FOR OH
H2O2 MONITORED BY TITANIUM TETRACHLORIDE PROCEDURE
OASIBI 1212, TECO 14B, BECKMAN 6800, BRADY 291 USED
CO FACTOR: 1.6/.265

T=0 AT 945 PST

	CALIB#
PAN	9
HCHO	1
REL INT	4

TS	DEG K	AVERAGE	303.9
REL HUM	%	AVERAGE	50.37
SSPOWER	KW	AVERAGE	20.91
RADION	MW/CM2	AVERAGE	0.230
H2O	PPM	AVERAGE	2.199E 04
NO	PPM	INIT COND	0.530
NO2-CORR	PPM	INIT COND	0.032
HCHO	PPM	INIT COND	0.371
PROPENE	PPM	INIT COND	0.112
N-C4	PPM	INIT COND	0.007
NEO-C5	PPM	INIT COND	0.008
CO	PPM	INIT COND	0.849
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	3.204
430.	2.366
403.	1.991
380.	1.633
370.	1.431
360.	1.174
350.	1.000
340.	0.765
330.	0.522
320.	0.288
310.	0.108
300.	0.016
290.	0.001
280.	0.0

K1=0.30 MIN-1

SAMPLING RATE = 1.692 L/MIN

48 GC SAMPLES TAKEN

EC -257
FORMALDEHYDE + PROPENE
1977 NOV 30

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	HCHO PPM	PROPENE PPM	N-C4 PPM	NEO-C5 PPM
945	0.	0.000	0.530	0.032	0.559	0.371	0.112	.00704	.00766
1000	15.	0.000	0.471	0.083	0.554	******	0.098	.00641	.00748
1015	30.	0.000	0.415	0.129	0.544	******	0.087	.00675	.00738
1030	45.	0.000	0.362	0.167	0.531	******	0.077	.00665	.00737
1045	60.	0.000	0.308	0.209	0.516	0.282	0.067	.00648	.00730
1100	75.	0.000	0.269	0.238	0.506	******	******	******	******
1115	90.	0.002	0.237	0.257	0.494	******	0.051	.00608	.00684
1130	105.	0.002	0.210	0.269	0.479	******	******	******	******
1145	120.	0.005	0.186	0.280	0.469	0.250	0.043	.00625	.00702
1200	135.	0.010	0.169	0.285	0.454	******	******	******	******
1215	150.	0.012	0.151	0.292	0.443	******	0.035	.00605	.00698
1230	165.	0.015	0.137	0.297	0.433	******	******	******	******
1245	180.	0.022	0.125	0.301	0.423	0.230	0.029	.00590	.00687
1300	195.	0.022	0.110	0.303	0.413	******	******	******	******
1315	210.	0.027	0.105	0.298	0.403	******	0.025	.00575	.00673
1330	225.	0.032	0.098	0.300	0.395	******	******	******	******
1345	240.	0.037	0.090	0.297	0.382	0.126	0.021	.00573	.00661
1400	255.	0.037	0.083	0.295	0.375	******	******	******	******
1415	270.	0.044	0.076	0.294	0.368	******	0.018	.00559	******
1430	285.	0.046	0.073	0.289	0.360	******	******	******	******
1445	300.	0.049	0.068	0.282	0.350	0.121	0.015	.00539	.00646
1500	315.	0.051	0.064	0.284	0.350	******	******	******	******
1515	330.	0.059	0.061	0.282	0.340	******	0.013	.00539	.00656
1530	345.	0.061	0.056	0.271	0.330	******	******	******	******
1545	360.	0.066	0.056	0.269	0.322	0.098	0.011	.00531	.00636

EC -257
FORMALDEHYDE + PROPENE
1977 NOV 30

CLOCK TIME	ELAPSED T(MIN)	CO PPM	H2O2 PPM	PAN PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM
945	0.	0.85	0.0	******	0.0010	0.0002	0.0013
1000	15.	0.86	******	******	******	******	******
1015	30.	0.91	0.0	******	0.0156	0.0002	0.0012
1030	45.	0.94	******	******	******	******	******
1045	60.	0.98	******	0.001	0.0268	0.0002	0.0018
1100	75.	1.03	******	******	******	******	******
1115	90.	1.06	0.0	0.002	0.0339	0.0002	0.0017
1130	105.	1.10	******	******	******	******	******
1145	120.	1.13	******	0.003	0.0353	0.0003	0.0020
1200	135.	1.14	******	******	******	******	******
1215	150.	1.17	0.002	0.004	0.0368	0.0002	0.0021
1230	165.	1.22	******	******	******	******	******
1245	180.	1.25	******	0.004	0.0368	0.0003	0.0030
1300	195.	1.28	******	******	******	******	******
1315	210.	1.29	******	0.005	0.0368	0.0003	0.0034
1330	225.	1.32	******	******	******	******	******
1345	240.	1.35	******	0.006	0.0361	0.0003	0.0036
1400	255.	1.35	******	******	******	******	******
1415	270.	1.39	******	0.006	0.0316	0.0003	0.0043
1430	285.	1.41	******	******	******	******	******
1445	300.	1.41	******	0.007	0.0324	0.0003	0.0036
1500	315.	1.42	******	******	******	******	******
1515	330.	1.48	0.001	0.007	0.0318	0.0003	******
1530	345.	1.48	******	******	******	******	******
1545	360.	1.51	******	0.007	0.0318	0.0004	0.0044

EC -257
FORMALDEHYDE + PROPENE
1977 NOV 30

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADION Mw/CM2	HCHO VOL L	H2O2 VOL PPM
945	0.	84.5	42.5	20.55	0.227	10.00	30.0
1000	15.	85.5	44.0	******	0.227	******	******
1015	30.	85.2	46.5	******	0.220	******	30.0
1030	45.	86.2	48.5	******	0.232	******	******
1045	60.	86.7	49.5	20.55	0.227	20.00	******
1100	75.	87.0	50.0	******	******	******	******
1115	90.	87.7	50.5	******	******	******	30.0
1130	105.	87.2	50.5	******	******	******	******
1145	120.	87.9	50.5	20.61	0.227	20.00	******
1200	135.	88.2	51.0	******	******	******	******
1215	150.	88.2	51.0	******	******	******	30.0
1230	165.	87.9	51.0	******	0.232	******	******
1245	180.	87.7	51.0	20.79	0.230	20.00	******
1300	195.	87.7	51.0	******	0.227	******	******
1315	210.	88.2	51.5	******	0.232	******	30.0
1330	225.	87.4	51.5	******	0.237	******	******
1345	240.	87.7	51.5	21.34	0.227	15.00	******
1400	255.	87.9	52.0	******	0.230	******	******
1415	270.	87.4	51.5	******	0.232	******	******
1430	285.	87.4	52.0	******	0.232	******	******
1445	300.	87.7	52.0	21.16	0.230	20.00	******
1500	315.	87.7	52.0	******	0.230	******	******
1515	330.	87.9	52.0	******	0.234	******	30.0
1530	345.	87.4	52.0	******	0.234	******	******
1545	360.	87.4	52.0	21.34	0.230	20.00	******

EC -257
FORMALDEHYDE + PROPENE
1977 NOV 30

CLOCK TIME	ELAPSED T(MIN)	NO2 PPM	NOX PPM	TOT NO3 PPM	TOT N PPM	H2O PPM	HCTOT PPMC
945	0.	0.032	0.559	0.0	0.562	16960.	0.778
1000	15.	0.083	0.554	0.000	0.554	18116.	0.730
1015	30.	0.129	0.545	0.001	0.545	18996.	0.689
1030	45.	0.169	0.532	0.001	0.530	20441.	0.647
1045	60.	0.210	0.518	0.001	0.518	21189.	0.607
1100	75.	0.239	0.508	0.002	0.508	21570.	******
1115	90.	0.259	0.496	0.002	0.496	22298.	0.554
1130	105.	0.271	0.481	0.002	0.481	21955.	******
1145	120.	0.283	0.471	0.003	0.469	22471.	0.522
1200	135.	0.288	0.457	0.003	0.457	22870.	******
1215	150.	0.296	0.447	0.004	0.447	22870.	0.493
1230	165.	0.300	0.437	0.004	0.437	22694.	******
1245	180.	0.305	0.427	0.004	0.430	22519.	0.469
1300	195.	0.308	0.418	0.004	0.418	22519.	******
1315	210.	0.303	0.408	0.005	0.408	23094.	0.405
1330	225.	0.305	0.401	0.005	0.403	22564.	******
1345	240.	0.303	0.388	0.006	0.393	22740.	0.343
1400	255.	0.300	0.381	0.006	0.383	23139.	******
1415	270.	0.300	0.374	0.006	0.376	22564.	0.323
1430	285.	0.296	0.366	0.006	0.369	22783.	******
1445	300.	0.288	0.357	0.007	0.357	22961.	0.311
1500	315.	0.291	0.357	0.007	0.354	22961.	******
1515	330.	0.288	0.347	0.007	0.349	23139.	0.294
1530	345.	0.278	0.337	0.007	0.335	22783.	******
1545	360.	0.276	0.330	0.007	0.332	22783.	0.277

EC -264
TOLUENE
1978 JAN 23

BEGIN IRRADIATION 1245; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
TOLUENE MONITORED BY 3-PART COLUMN
TENAX GC SAMPLES BEGINNING AT 1215,1230,1430,1530,1605
(10.8 L EACH EXCEPT 21.6 AT 1605)
TENAX GC-MS SAMPLES BEGINNING AT 1230,1345,1445,1545 (EACH 10.8 L)
NO SPECTRAL DISTRIBUTION TAKEN
DASIBI 1212, TECO 148-1, BRADY 291 USED

T=0 AT 1245 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	304.0
REL HUM	%	AVERAGE	41.30
SSPLNER	Km	AVERAGE	11.61
RADIOM	MW/CM2	AVERAGE	0.262
H2O	PPM	AVERAGE	1.839E 04
NO	PPM	INIT COND	0.420
NO2-CORR	PPM	INIT COND	0.056
TOLUENE	PPM	INIT COND	1.156
HCHO	PPM	INIT COND	0.008

* ASSIGNED INITIAL CONDITION

K1=0.35 MIN-1

SAMPLING RATE = 1.535 L/MIN

16 GC SAMPLES TAKEN

EC -264
TOLUENE
1978 JAN 23

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	PAN PPM	HCHO PPM	ME-N PPM
1245	0.	0.0	0.420	0.056	0.470	1.156	0.000	0.008	0.0
1300	15.	0.0	0.391	0.076	0.468	******	******	******	******
1315	30.	0.0	0.340	0.121	0.461	******	******	******	0.0
1330	45.	0.018	0.269	0.183	0.450	******	******	******	******
1345	60.	0.018	0.191	0.241	0.432	******	0.004	0.002	0.0
1350	65.	******	0.164	0.263	0.426	0.989	******	******	******
1400	75.	0.021	0.118	0.284	0.401	******	******	******	******
1415	90.	0.053	0.073	0.290	0.362	******	0.013	******	0.0
1430	105.	0.100	0.046	0.279	0.324	******	******	******	******
1445	120.	0.154	0.028	0.255	0.277	0.858	0.024	0.017	0.0004
1500	135.	0.218	0.022	0.205	0.228	******	******	******	******
1515	150.	0.280	0.015	0.157	0.173	******	0.044	******	0.0007
1530	165.	0.342	0.015	0.115	0.130	******	******	******	******
1545	180.	0.395	0.016	0.072	0.088	******	0.056	0.032	0.0014
1550	185.	******	0.013	0.067	0.080	0.650	******	******	******
1600	195.	0.418	0.012	0.050	0.064	******	******	******	******
1615	210.	0.419	0.012	0.035	0.046	******	0.067	******	0.0011
1630	225.	0.413	0.012	0.029	0.039	******	******	******	******
1645	240.	0.400	0.011	0.027	0.037	******	0.071	0.029	0.0011

EC -264
TOLUENE
1978 JAN 23

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RALIOM MW/CM2	HCHO VOL L
1245	0.	87.7	39.0	11.81	0.271	20.00
1300	15.	86.2	40.0	******	0.266	******
1315	30.	87.2	41.5	11.60	0.269	******
1330	45.	87.9	42.0	******	0.259	******
1345	60.	88.7	42.0	11.59	0.259	20.00
1350	65.	88.7	42.5	******	0.256	******
1400	75.	88.7	42.5	******	0.256	******
1415	90.	88.2	42.5	******	0.269	******
1430	105.	88.7	42.5	******	0.269	******
1445	120.	88.9	42.5	11.88	0.269	20.00
1500	135.	89.4	42.5	******	0.266	******
1515	150.	88.9	42.0	******	0.266	******
1530	165.	88.7	42.0	******	0.266	******
1545	180.	89.2	42.0	11.88	0.261	20.00
1550	185.	89.4	41.5	******	0.264	******
1600	195.	89.4	41.5	******	0.264	******
1615	210.	86.7	42.5	******	0.266	******
1630	225.	87.2	43.5	******	0.264	******
1645	240.	87.4	44.0	12.11	0.266	20.00

EC -265
TOLUENE
1978 FEB 2

BEGIN IRRADIATION 1245; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
DASIBI 1212 ON STANDBY UNTIL 1450
TOLUENE AND OXYGENATES MONITORED BY 3-PART COLUMN
TENAX GC SAMPLES BEGINNING AT 0925,1200,1330,1435,1530,1630: EACH 10.8 L
TENAX GC-MS SAMPLES BEGINNING AT 0925,1215,1345,1445,1545,61645: EACH 10.8 L
NO SPECTRAL DISTRIBUTION TAKEN
TECO 14B-1, BRADY 291, & DASIBI 1212 USED

T=0 AT 1245 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.6
REL HUM	%	AVERAGE	54.39
SSPOWER	KW	AVERAGE	11.09
RADIOM	MW/CM2	AVERAGE	0.201
H2O	PPM	AVERAGE	2.204E 04
NO	PPM	INIT COND	0.435
NO2-CORR	PPM	INIT COND	0.047
TOLUENE	PPM	INIT COND	1.070
HCHO	PPM	INIT COND	0.012
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

K1=0.35 MIN-1

SAMPLING RATE = 1.535 L/MIN

16 GC SAMPLES TAKEN

EC -265
TOLUENE
1978 FEB 2

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	ME-N PPM
1245	0.	******	0.435	0.047	0.482	1.070	0.000	0.012	0.0010	0.0004	0.0025	0.0
1300	15.	******	0.363	0.088	0.472	******	******	******	******	******	******	******
1315	30.	******	0.321	0.146	0.468	******	0.001	******	******	******	******	0.0
1330	45.	******	0.243	0.207	0.447	******	******	******	******	******	******	******
1345	60.	******	0.162	0.263	0.422	1.029	0.004	******	******	0.0004	0.0092	0.0
1400	75.	******	0.098	0.291	0.388	******	******	0.011	******	******	******	******
1415	90.	******	0.053	0.300	0.352	******	0.014	******	******	******	******	0.0
1430	105.	******	0.035	0.276	0.312	******	******	******	******	******	******	******
1445	120.	******	0.024	0.244	0.264	0.873	0.031	0.019	0.0037	0.0011	******	0.0001
1500	135.	0.215	0.020	0.194	0.212	******	******	******	******	******	******	******
1515	150.	0.264	0.018	0.155	0.171	******	0.043	******	******	******	******	0.0001
1530	165.	0.320	0.013	0.111	0.123	******	******	******	******	******	******	******
1545	180.	0.364	0.010	0.079	0.088	0.729	0.059	0.036	0.0056	0.0026	0.0293	0.0002
1600	195.	0.388	0.010	0.055	0.065	******	******	******	******	******	******	******
1615	210.	0.393	0.009	0.036	0.044	******	0.072	******	******	******	******	0.0002
1630	225.	0.391	0.010	0.032	0.038	******	******	******	******	******	******	******
1645	240.	0.379	0.007	0.028	0.035	0.631	0.070	0.039	0.0049	0.0030	0.0269	0.0003

EC -265
TOLUENE
1978 FEB 2

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1245	0.	85.0	49.5	11.88	0.271	20.00
1300	15.	85.5	50.5	******	0.266	******
1315	30.	86.0	51.5	******	0.256	******
1330	45.	85.3	52.5	******	0.259	******
1345	60.	84.0	54.5	11.50	0.261	******
1400	75.	84.5	55.0	******	******	20.00
1415	90.	85.0	55.5	******	******	******
1430	105.	85.0	55.5	******	******	******
1445	120.	85.0	55.5	11.66	0.256	20.00
1500	135.	85.2	55.5	******	******	******
1515	150.	85.2	55.5	******	******	******
1530	165.	85.0	55.5	******	0.261	******
1545	180.	85.2	55.5	11.66	0.256	20.00
1600	195.	85.2	55.0	******	******	******
1615	210.	85.2	55.0	******	******	******
1630	225.	85.2	55.0	******	******	******
1645	240.	85.2	55.0	11.77	0.261	20.00

EC -266
TOLUENE
1978 FEB 7

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
TOLUENE AND OXYGENATES MONITORED BY 3-PART COLUMN
TENAX GC SAMPLES TAKEN AT BEGINNING OF EACH HR, 1100-1600 (10.8 L EACH)
TENAX GC-MS SAMPLES TAKEN BEGINNING AT 0945,1016,1316,1620
(EACH 19.3 L SAMPLES EXCEPT 19.4 AT 1316)
ORADY 291,DASIBI 1212,6 TECO 14B-1 USED
CO FACTOR 1.6/47.0; BECKMAN 6800 MANUAL OPERATION: SAMPLES PULLED 42 MIN TOTAL

T=0 AT 1015 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.6
REL HUM	%	AVERAGE	47.13
SSPOWER	KW	AVERAGE	11.85
RADIOM	MW/CM2	AVERAGE	0.263
NEC	PPM	AVERAGE	1.928E 04
NO	PPM	INIT COND	0.432
NO2-CORR	PPM	INIT COND	0.056
TOLUENE	PPM	INIT COND	1.196
CO	PPM	INIT CONC	0.330
HCHO	PPM	INIT COND	0.010
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002
M-CRESOL	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.538
430.	1.543
403.	1.442
380.	1.361
370.	1.248
360.	1.093
350.	1.000
340.	0.809
330.	0.573
320.	0.324
310.	0.129
300.	0.021
290.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.611 L/MIN

12 GC SAMPLES TAKEN

EC -266
TOLUENE
1978 FEB 7

CLOCK TIME	ELAPSED TIMIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM
1015	0.	0.000	0.432	0.059	0.494	1.196
1030	15.	0.000	0.408	0.080	0.484	******
1045	30.	0.000	0.347	0.130	0.478	1.149
1100	45.	0.002	0.274	0.186	0.461	******
1115	60.	0.010	0.189	0.250	0.441	1.046
1130	75.	0.022	0.121	0.288	0.407	******
1145	90.	0.056	0.072	0.300	0.371	0.977
1200	105.	0.095	0.044	0.284	0.329	******
1215	120.	0.144	0.029	0.259	0.285	0.860
1230	135.	0.200	0.021	0.219	0.240	******
1245	150.	0.249	0.016	0.174	0.192	0.826
1300	165.	0.305	0.013	0.134	0.146	******
1315	180.	0.357	0.012	0.090	0.101	0.738
1330	195.	0.391	0.010	0.059	0.068	******
1345	210.	0.403	0.010	0.040	0.047	0.662
1400	225.	0.403	0.010	0.030	0.037	******
1415	240.	0.391	0.011	0.027	0.033	0.629
1430	255.	0.384	0.010	0.025	0.031	******
1445	270.	0.374	0.010	0.019	0.029	0.602
1500	285.	0.369	0.009	0.024	0.029	******
1515	300.	0.362	0.009	0.023	0.031	0.577
1530	315.	0.352	0.009	0.023	0.030	******
1545	330.	0.344	0.007	0.023	0.027	0.572
1600	345.	0.340	0.007	0.021	0.029	******
1615	360.	0.332	0.009	0.018	0.026	0.505

EC -266
TOLUENE
1978 FEB 7

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	ME-N PPM	BZALD PPM GC-MS	O-CRESOL PPM GC-MS	M-CRESOL PPM GC-MS	P-CRESOL PPM GC-MS	ONT PPM GC-MS	MNT PPM GC-MS
1015	0.	0.33	0.000	0.010	0.0006	0.0001	0.0017	0.0	0.0	0.0	0.0010	0.0	0.0	0.0
1030	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	30.	0.39	0.001	******	0.0016	0.0003	0.0022	0.0	******	******	******	******	******	******
1100	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	60.	******	0.004	0.003	0.0019	0.0004	0.0041	0.0006	0.0140	0.0090	0.0010	0.0010	0.0	0.0010
1130	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	90.	******	0.014	******	0.0023	0.0008	0.0078	0.0007	******	******	******	******	******	******
1200	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	120.	0.48	0.029	0.020	0.0030	0.0011	0.0061	0.0010	0.0160	0.0070	0.0010	0.0020	0.0	0.0020
1230	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	150.	******	0.042	******	0.0041	0.0018	0.0191	0.0010	******	******	******	******	******	******
1300	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	180.	******	0.058	0.039	0.0048	0.0024	******	0.0008	******	******	******	******	******	******
1330	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	210.	******	0.073	******	0.0051	0.0022	0.0266	0.0008	******	******	******	******	******	******
1400	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	240.	0.68	0.075	0.042	0.0066	0.0025	0.0289	0.0008	0.0220	0.0020	0.0020	0.0010	0.0	0.0030
1430	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	270.	******	0.073	******	0.0065	0.0023	0.0234	0.0010	******	******	******	******	******	******
1500	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	300.	******	0.067	0.048	0.0073	0.0024	0.0375	0.0010	0.0190	0.0010	0.0010	0.0010	0.0	0.0030
1530	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	330.	******	0.064	******	0.0074	0.0023	0.0250	0.0008	******	******	******	******	******	******
1600	345.	0.83	******	******	******	******	******	******	******	******	******	******	******	******
1615	360.	******	0.063	0.075	0.0071	0.0020	0.0264	0.0008	0.0180	0.0020	0.0020	0.0010	0.0	0.0030

EC -266
TOLUENE
1978 FEB 7

CLOCK TIME	ELAPSED T(MIN)	PNT PPM GC-MS
1015	0.	0.0
1030	15.	******
1045	30.	******
1100	45.	******
1115	60.	0.0010
1130	75.	******
1145	90.	******
1200	105.	******
1215	120.	0.0020
1230	135.	******
1245	150.	******
1300	165.	******
1315	180.	******
1330	195.	******
1345	210.	******
1400	225.	******
1415	240.	0.0040
1430	255.	******
1445	270.	******
1500	285.	******
1515	300.	0.0030
1530	315.	******
1545	330.	******
1600	345.	******
1615	360.	0.0030

EC -266
TOLUENE
1978 FEB 7

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kh	RADIOM MH/CM2	HCHO VOL L
1015	0.	84.8	43.5	11.68	0.264	20.00
1030	15.	83.5	44.0	******	0.266	******
1045	30.	85.5	45.0	11.78	0.264	******
1100	45.	83.8	46.0	******	0.259	******
1115	60.	84.0	47.0	11.84	0.264	20.00
1130	75.	84.8	48.0	******	******	******
1145	90.	85.0	48.0	******	0.261	******
1200	105.	85.2	48.5	******	******	******
1215	120.	85.5	48.5	11.73	0.261	20.00
1230	135.	85.2	48.5	******	0.261	******
1245	150.	85.2	48.5	******	******	******
1300	165.	85.5	48.5	******	******	******
1315	180.	85.2	48.5	11.73	******	20.00
1330	195.	85.5	48.5	******	0.261	******
1345	210.	85.5	48.5	******	0.259	******
1400	225.	85.7	48.5	11.88	0.259	******
1415	240.	85.5	48.5	11.91	0.261	20.00
1430	255.	86.0	48.5	******	******	******
1445	270.	86.0	48.5	******	0.266	******
1500	285.	85.7	48.0	******	0.264	******
1515	300.	86.2	48.0	11.95	0.264	20.00
1530	315.	85.5	48.0	******	******	******
1545	330.	85.7	48.0	******	******	******
1600	345.	86.0	48.0	******	******	******
1615	360.	86.0	48.0	12.15	0.271	20.00

EC -269
TOLUENE #3
1978 MAR 16

BEGIN IRRADIATION 1045; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
TOLUENE AND OXYGENATES MONITORED BY 3-PART COLUMN
HCHO MAY BE LOW BY FACTOR OF 2.2 DUE TO INCORRECT ROTOMETER SETTING.
SETTING FOR THIS RUN NOT KNOWN

TENAX GC SAMPLES TAKEN BEGINNING AT 0845,0945,1130,1230,1330,1430&1530
GC ANALYSIS USING 10FT X 2MM GLASS COLUMN CONTAINING TENAX GC (60-80 MESH)
TENAX GC-MS SAMPLES TAKEN BEGINNING 0900,1000,1145,1245,1345,1445&1545
GC-MS ANALYSIS USING 25M X 0.2MM WALL-COATED GLASS CAPILLARY COLUMN
CONTAINING UCON LB
EACH TENAX GC & TENAX GC-MS SAMPLE 10.8 L

BRADY 291, DASIBI 1212, & TECO 14B-1 USED;
CO FACTOR 1.45/17.0; BECKMAN 6800 MANUAL OPERATION

T=0 AT 1045 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.7
REL HUM	%	AVERAGE	46.16
SSPOWER	KW	AVERAGE	11.95
RADIOM	MW/CM2	AVERAGE	0.263
H2O	PPM	AVERAGE	1.853E 04
NO	PPM	INIT COND	0.398
NO2-CORR	PPM	INIT COND	0.074
TOLUENE	PPM	INIT COND	0.566
HCHO	PPM	INIT COND	0.003
ACETONE	PPM	INIT COND	0.005
BZALD	PPM	INIT COND	0.001
BZALDBZN	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

EC -269
TOLUENE #3
1976 MAR 16

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.667
430.	1.584
403.	1.473
380.	1.382
370.	1.265
360.	1.112
350.	1.000
340.	0.807
330.	0.575
320.	0.322
310.	0.126
300.	0.019
290.	0.001
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.856 L/MIN

24 GC SAMPLES TAKEN

EC -269
TOLUENE #3
1976 MAR 16

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOx-CORR PPM	TOLUENE PPM
1045	0.	0.000	0.358	0.074	0.472	0.566
1100	15.	0.000	0.368	0.095	0.462	******
1115	30.	0.000	0.332	0.124	0.456	0.550
1130	45.	0.000	0.291	0.154	0.444	******
1145	60.	0.005	0.249	0.184	0.433	0.467
1200	75.	0.007	0.206	0.212	0.418	******
1215	90.	0.012	0.165	0.236	0.400	0.473
1230	105.	0.017	0.134	0.249	0.383	******
1245	120.	0.027	0.109	0.255	0.363	0.442
1300	135.	0.032	0.087	0.258	0.343	******
1315	150.	0.044	0.068	0.260	0.327	0.400
1330	165.	0.059	0.059	0.251	0.308	******
1345	180.	0.071	0.048	0.242	0.288	0.389
1400	195.	0.086	0.039	0.230	0.269	******
1415	210.	0.100	0.034	0.218	0.250	0.364
1430	225.	0.117	0.028	0.203	0.231	******
1445	240.	0.134	0.024	0.188	0.213	0.345
1500	255.	0.149	0.023	0.171	0.193	******
1515	270.	0.165	0.018	0.159	0.176	0.322
1530	285.	0.183	0.016	0.140	0.155	******
1545	300.	0.210	0.013	0.121	0.135	0.288
1600	315.	0.230	0.013	0.105	0.117	******
1615	330.	0.254	0.011	0.090	0.098	0.270
1630	345.	0.274	0.010	0.070	0.080	******
1645	360.	0.298	0.010	0.054	0.061	0.243

EC -269
TOLUENE #3
1978 MAR 16

CLOCK TIME	ELAPSED TIME(M)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	ME-N PPM	PHENOL PPM GC-MS	BZALD PPM GC-MS	O-CRESOL PPM GC-MS	O-CRESOL PPM TENA GC	M-CRESOL PPM GC-MS	P-CRESOL PPM GC-MS
1045	0.	******	0.000	0.003	0.0005	0.0001	0.0054	0.0	0.0	0.0000	0.0	0.0020	0.0	0.0
1100	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	30.	******	0.001	******	0.0031	0.0003	0.0049	0.0	******	******	******	******	******	******
1130	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	60.	0.21	0.002	0.011	0.0029	0.0012	0.0037	0.0	0.0005	0.0034	0.0034	******	0.0002	0.0005
1200	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	90.	******	0.004	******	0.0039	0.0010	0.0057	0.0	******	******	******	******	******	******
1230	105.	******	******	******	******	******	******	******	******	******	******	0.0069	******	******
1245	120.	******	0.005	0.022	0.0042	0.0013	0.0073	0.0001	0.0003	0.0029	0.0022	******	0.0002	0.0009
1300	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	150.	******	0.012	******	0.0047	0.0014	0.0069	******	******	******	******	******	******	******
1330	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	180.	0.31	0.016	0.031	0.0049	0.0014	0.0064	0.0004	0.0011	0.0036	0.0053	0.0056	0.0004	0.0007
1400	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	210.	******	0.021	******	0.0055	0.0020	0.0117	******	******	******	******	******	******	******
1430	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	240.	0.34	0.024	0.041	0.0063	0.0020	0.0124	0.0007	0.0039	0.0056	0.0016	0.0050	******	******
1500	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	270.	******	0.028	******	0.0057	0.0021	0.0137	0.0008	******	******	******	******	0.0010	0.0001
1530	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	300.	0.41	0.037	0.040	0.0064	0.0025	0.0180	******	******	******	******	0.0009	******	******
1600	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1615	330.	******	0.040	******	0.0065	0.0027	0.0188	0.0010	******	******	******	******	******	******
1630	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1645	360.	0.47	0.050	0.038	0.0074	0.0031	0.0191	0.0012	0.0019	0.0053	0.0005	******	0.0003	0.0001

EC -269
TOLUENE #3
1978 MAR 16

CLOCK TIME	ELAPSED TIMIN	ACEPHEN PPM GC-MS	ONT PPM GC-MS	ONT PPM TENX GC	MNT PPM GC-MS	PNT PPM GC-MS	23HNT PPM GC-MS	43HNT PPM GC-MS	25HNT PPM GC-MS	32HNT PPM GC-MS	PNT43HNT PPM TENX GC	MNT23HNT PPM TENX GC	BENZ-NO2 PPM GC-MS	BZALDBZN PPM TENX GC
1045	0.	0.0	0.0	******	0.0	0.0	0.0	0.0	0.0	0.0	******	******	0.0	0.0033
1100	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	30.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	45.	******	******	0.0002	******	******	******	******	******	******	******	0.0005	******	0.0055
1145	60.	0.0010	0.0000	******	0.0002	0.0001	0.0000	0.0000	0.0001	0.0	******	******	0.0001	******
1200	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	90.	******	******	******	******	******	******	******	******	******	******	******	******	******
1230	105.	******	******	0.0010	******	******	******	******	******	******	******	0.0010	******	0.0070
1245	120.	0.0007	0.0000	******	0.0002	0.0002	0.0001	0.0001	0.0004	0.0	******	******	0.0002	******
1300	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	150.	******	******	******	******	******	******	******	******	******	******	******	******	******
1330	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	180.	0.0034	0.0001	0.0006	0.0008	0.0007	0.0006	0.0008	0.0012	0.0000	0.0015	0.0015	0.0006	0.0075
1400	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	210.	******	******	******	******	******	******	******	******	******	******	******	******	******
1430	225.	******	******	0.0007	******	******	******	******	******	******	0.0021	0.0016	******	0.0087
1445	240.	0.0023	0.0001	******	0.0010	0.0008	0.0013	0.0013	0.0013	******	******	******	0.0008	******
1500	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	270.	******	******	******	******	******	******	******	******	******	******	******	******	******
1530	285.	******	******	0.0035	******	******	******	******	******	******	0.0027	0.0016	******	0.0065
1545	300.	******	******	******	******	******	******	******	******	******	******	******	******	******
1600	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1615	330.	******	******	******	******	******	******	******	******	******	******	******	******	******
1630	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1645	360.	0.0035	0.0001	******	0.0009	0.0009	0.0022	0.0021	0.0024	******	******	******	0.0008	******

EC -269
TOLUENE #3
1976 MAR 16

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1045	0.	84.8	37.0	11.74	******	20.00
1100	15.	84.8	40.0	******	0.266	******
1115	30.	84.8	43.0	******	0.259	******
1130	45.	85.2	44.5	******	0.266	******
1145	60.	85.2	46.0	11.91	0.261	20.00
1200	75.	85.5	46.5	******	******	******
1215	90.	85.5	47.0	******	******	******
1230	105.	85.7	47.0	******	******	******
1245	120.	85.5	47.5	11.68	0.259	20.00
1300	135.	85.5	47.5	******	******	******
1315	150.	85.5	47.5	******	******	******
1330	165.	85.2	47.5	******	******	******
1345	180.	85.5	47.5	11.84	0.261	20.00
1400	195.	85.2	46.0	******	0.261	******
1415	210.	85.2	46.0	******	******	******
1430	225.	85.2	46.0	******	******	******
1445	240.	85.5	46.0	11.91	0.261	20.00
1500	255.	85.5	46.0	******	0.261	******
1515	270.	85.5	48.0	******	******	******
1530	285.	85.5	48.0	******	******	******
1545	300.	85.2	48.0	12.04	0.261	20.00
1600	315.	85.7	48.0	******	0.266	******
1615	330.	85.5	46.0	******	0.266	******
1630	345.	85.5	48.0	******	0.264	******
1645	360.	85.5	48.0	12.31	0.269	20.00

EC -270
TOLUENE #5
1978 MAR 20

BEGIN IRRADIATION 1000; 0925 INCH PYREX FILTER; TRICHROIC FILTER OUT
TOLUENE AND OXYGENATES MONITORED BY 3-PART COLUMN
HCHO MAY BE LOW BY FACTOR OF 2.2 DUE TO INCORRECT ROTOMETER SETTING.
SETTING FOR THIS RUN NOT KNOWN
TENAX GC SAMPLES TAKEN BEGINNING AT 0613,1100,1200,1300,1400,1500&1600
EACH SAMPLE 10.8 L
GC ANALYSES USING 10 FT X 2 MM GLASS COLUMN CONTAINING TENAX GC (60/80 MESH)
DASIBI 1212, TECO 14B-1, ERALY 291 USED
CO FACTOR 1.45/.16; BECKMAN 6800 MANUAL OPERATION

T=0 AT 1000 PST

	CALIB#
PAN	2
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.6
REL HUM	%	AVERAGE	45.56
SSPOWER	KW	AVERAGE	12.02
RADIOM	MW/CM2	AVERAGE	0.264
H2O	PPM	AVERAGE	1.892E 04
NO	PPM	INIT COND	0.414
NO2-CORR	PPM	INIT COND	0.051
TOLUENE	PPM	INIT COND	0.576
HCHO	PPM	INIT COND	0.171
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.004
BZA DBZN	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.665
430.	1.603
403.	1.515
380.	1.395
370.	1.288
360.	1.112
350.	1.000
340.	0.818
330.	0.570
320.	0.320
310.	0.131
300.	0.019
290.	0.001
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.954 L/MIN

26 GC SAMPLES TAKEN

EC -270
TOLUENE #5
1978 MAR 20

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM
1000	0.	0.000	0.414	0.051	0.465	0.576
1015	15.	0.000	0.365	0.091	0.455	******
1030	30.	0.000	0.304	0.142	0.446	0.542
1045	45.	0.005	0.242	0.191	0.432	******
1100	60.	0.010	0.182	0.233	0.415	0.497
1115	75.	0.020	0.133	0.260	0.392	******
1130	90.	0.034	0.095	0.274	0.368	0.466
1145	105.	0.046	0.071	0.273	0.343	******
1200	120.	0.071	0.053	0.269	0.319	0.430
1215	135.	0.090	0.039	0.255	0.293	******
1230	150.	0.112	0.032	0.241	0.271	0.403
1245	165.	0.139	0.026	0.221	0.244	******
1300	180.	0.164	0.021	0.200	0.220	0.378
1315	195.	0.186	0.018	0.179	0.196	******
1330	210.	0.208	0.018	0.156	0.175	0.345
1345	225.	0.232	0.012	0.143	0.154	******
1400	240.	0.261	0.010	0.124	0.132	0.321
1415	255.	0.286	0.009	0.104	0.111	******
1430	270.	0.313	0.007	0.082	0.088	0.289
1445	285.	0.337	0.006	0.064	0.069	******
1500	300.	0.357	0.007	0.053	0.059	0.262
1515	315.	0.366	0.006	0.038	0.043	******
1530	330.	0.369	0.006	0.038	0.041	0.232
1545	345.	0.366	0.006	0.027	0.032	******
1600	360.	0.362	0.005	0.024	0.027	0.217

EC -270
TOLUENE #5
1978 MAR 20

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	O-CRESOL PPM	ONT PPM TENA GC	PNT43HNT PPM TENA GC	MNT23HNT PPM TENA GC	BZALDBZN PPM TENA GC
1000	0.	******	0.000	0.171	0.0013	0.0003	0.0038	0.0	0.0	0.0	0.0	0.0028
1015	15.	******	******	******	******	******	******	******	******	******	******	******
1030	30.	******	0.001	******	0.0016	0.0004	0.0029	******	******	******	******	******
1045	45.	******	******	******	******	******	******	******	******	******	******	******
1100	60.	1.30	0.003	0.086	0.0027	0.0007	0.0046	0.0071	0.0006	0.0010	0.0006	0.0072
1115	75.	******	******	******	******	******	******	******	******	******	******	******
1130	90.	******	0.007	******	0.0028	0.0009	0.0059	******	******	******	******	******
1145	105.	******	******	******	******	******	******	******	******	******	******	******
1200	120.	1.38	******	0.113	0.0035	0.0013	0.0100	******	******	******	******	******
1215	135.	******	******	******	******	******	******	******	******	******	******	******
1230	150.	******	0.019	******	0.0039	0.0015	0.0112	******	******	******	******	******
1245	165.	******	******	******	******	******	******	******	******	******	******	******
1300	180.	1.45	0.025	0.086	0.0041	0.0020	0.0121	0.0017	0.0020	0.0026	0.0011	0.0089
1315	195.	******	******	******	******	******	******	******	******	******	******	******
1330	210.	******	0.030	******	0.0051	0.0023	0.0146	******	******	******	******	******
1345	225.	******	******	******	******	******	******	******	******	******	******	******
1400	240.	1.52	0.034	0.077	0.0056	0.0027	0.0161	0.0009	0.0001	0.0029	0.0020	0.0096
1415	255.	******	******	******	******	******	******	******	******	******	******	******
1430	270.	******	0.041	******	0.0050	0.0030	0.0179	******	******	******	******	******
1445	285.	******	******	******	******	******	******	******	******	******	******	******
1500	300.	1.64	0.050	0.063	0.0051	0.0033	0.0215	0.0010	0.0	0.0036	0.0024	0.0113
1515	315.	******	******	******	******	******	******	******	******	******	******	******
1530	330.	******	0.054	******	0.0053	0.0032	0.0171	******	******	******	******	******
1545	345.	******	******	******	******	******	******	******	******	******	******	******
1600	360.	1.69	0.057	0.051	0.0059	0.0037	0.0227	0.0007	0.0	0.0035	0.0017	0.0101

EC -270
TOLUENE #5
1978 MAR 20

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADION MW/CM2	HCHO VOL L
1000	0.	81.1	42.0	11.92	0.256	20.00
1015	15.	84.3	44.5	******	0.266	******
1030	30.	84.3	46.0	******	0.261	******
1045	45.	85.0	47.5	******	0.266	******
1100	60.	85.7	48.0	12.10	0.269	30.00
1115	75.	86.0	48.5	******	0.266	******
1130	90.	86.0	48.5	******	******	******
1145	105.	86.0	49.0	******	******	******
1200	120.	86.2	49.0	12.09	0.264	20.00
1215	135.	86.0	49.0	******	0.266	******
1230	150.	86.0	49.5	******	******	******
1245	165.	86.0	49.5	******	******	******
1300	180.	86.0	49.5	12.02	0.266	20.00
1315	195.	86.0	49.5	******	******	******
1330	210.	86.2	49.5	******	******	******
1345	225.	86.2	49.5	******	******	******
1400	240.	86.5	49.5	11.99	0.269	20.00
1415	255.	86.2	49.5	******	******	******
1430	270.	86.2	49.5	******	******	******
1445	285.	86.0	49.5	******	******	******
1500	300.	86.2	49.5	12.02	0.266	20.00
1515	315.	85.5	49.5	******	0.259	******
1530	330.	85.7	50.0	******	******	******
1545	345.	85.7	50.0	******	******	******
1600	360.	85.7	49.5	12.02	0.264	20.00

EC -.71
TOLUENE #2
1978 MAR 21

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
TOLUENE AND OXYGENATES MONITORED BY 3-PART COLUMN
HCHO MAY BE LOW BY FACTOR OF 2.2 DUE TO INCORRECT ROTOMETER SETTING.
SETTING FOR THIS RUN NOT KNOWN
TENAX GC SAMPLES TAKEN BEGINNING AT 0805,1045,1145,1345,144561545
GC ANALYSES USING 10 FT X 2 MM GLASS COLUMN CONTAINING TENAX GC (60/80 MESH)
TENAX GC-MS SAMPLES TAKEN BEGINNING 0820,0915,0930,1030,1215,123061430
EACH TENAX GC & TENAX GC-MS SAMPLE 10.8 L
DAS101 1212, TECO 148-1, ERADY 291 USED
CO FACTOR 1.45/.163; BECKMAN 6800 MANUAL OPERATION

T=0 AT 945 PST

	CAL18#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.5
REL HUM	%	AVERAGE	49.32
SSPOWER	KW	AVERAGE	12.12
RADIOM	MW/CM2	AVERAGE	0.269
H2O	PPM	AVERAGE	2.0C7E 04
NO	PPM	INIT COND	0.186
NO2-CORR	PPM	INIT COND	0.028
TOLUENE	PPM	INIT COND	1.146
HCHO	PPM	INIT COND	0.004
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003
BZALDBZN	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.660
430.	1.591
403.	1.466
380.	1.375
370.	1.272
360.	1.125
350.	1.000
340.	0.822
330.	0.570
320.	0.318
310.	0.125
300.	0.019
290.	0.001
280.	0.0

K1=0.36 MIN-1

SAMPLING RATE = 2.105 L/MIN

27 GC SAMPLES TAKEN

EC -271
TOLUENE #2
1978 MAR 21

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOx-CORR PPM	TOLUENE PPM
945	0.	0.000	0.186	0.028	0.215	1.146
1000	15.	0.007	0.125	0.082	0.206	******
1015	30.	0.046	0.043	0.142	0.185	0.995
1030	45.	0.130	0.014	0.129	0.143	******
1045	60.	0.222	0.010	0.085	0.095	0.882
1100	75.	0.278	0.006	0.050	0.054	******
1115	90.	0.296	0.005	0.025	0.029	0.819
1130	105.	0.293	0.004	0.019	0.023	******
1145	120.	0.286	0.004	0.014	0.018	0.770
1200	135.	0.274	0.005	0.011	0.016	******
1215	150.	0.269	0.004	0.012	0.017	0.745
1230	165.	0.261	0.004	0.013	0.017	******
1245	180.	0.257	0.004	0.011	0.015	0.706
1300	195.	0.252	0.004	0.012	0.017	******
1315	210.	0.247	0.004	0.014	0.018	0.695
1330	225.	0.242	0.004	0.015	0.019	******
1345	240.	0.239	0.004	0.015	0.019	0.676
1400	255.	0.237	0.004	0.016	0.020	******
1415	270.	0.232	0.004	0.013	0.017	0.625
1430	285.	0.230	0.004	0.016	0.020	******
1445	300.	0.227	0.004	0.018	0.021	0.622
1500	315.	0.225	0.004	0.017	0.021	******
1515	330.	0.222	0.004	0.018	0.021	0.604
1530	345.	0.222	0.004	0.019	0.023	******
1545	360.	0.217	0.004	0.023	0.027	0.585

EC -271
TOLUENE #2
1976 MAR 21

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	O-CRESOL PPM TENA GC	DNT PPM TENA GC	PNT43HNT PPM TENA GC	PNT23HNT PPM TENA GC	BZALDBZN PPM TENA GC
945	0.	******	0.000	0.004	0.0011	0.0003	0.0028	0.0	0.0	0.0	0.0	0.0024
1000	15.	******	******	******	******	******	******	******	******	******	******	******
1015	30.	******	0.005	******	0.0013	0.0007	0.0072	******	******	******	******	******
1030	45.	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.64	0.028	0.011	0.0022	0.0021	0.0114	0.0126	0.0001	0.0024	0.0008	0.0151
1100	75.	******	******	******	******	******	******	******	******	******	******	******
1115	90.	******	0.047	******	0.0033	0.0026	0.0143	******	******	******	******	******
1130	105.	******	******	******	******	******	******	******	******	******	******	******
1145	120.	0.76	0.052	0.033	0.0041	0.0025	0.0138	0.0062	0.0	0.0023	0.0012	0.0172
1200	135.	******	******	******	******	******	******	******	******	******	******	******
1215	150.	******	0.053	******	0.0053	0.0026	0.0133	******	******	******	******	******
1230	165.	******	******	******	******	******	******	******	******	******	******	******
1245	180.	0.85	0.052	0.036	0.0078	0.0027	0.0138	0.0052	0.0	0.0025	0.0006	0.0149
1300	195.	******	******	******	******	******	******	******	******	******	******	******
1315	210.	******	0.049	******	0.0070	0.0027	0.0158	******	******	******	******	******
1330	225.	******	******	******	******	******	******	******	******	******	******	******
1345	240.	******	0.046	0.042	0.0085	0.0024	0.0148	0.0056	0.0	0.0020	0.0010	0.0159
1400	255.	******	******	******	******	******	******	******	******	******	******	******
1415	270.	******	0.046	******	0.0075	0.0024	0.0170	******	******	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.99	0.041	0.042	0.0075	0.0025	0.0180	0.0047	0.0	0.0025	0.0021	0.0159
1500	315.	******	******	******	******	******	******	******	******	******	******	******
1515	330.	******	0.040	******	0.0106	0.0026	0.0143	******	******	******	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******
1545	360.	1.04	0.039	0.028	0.0161	0.0032	0.0246	******	******	******	******	******

EC -271
TOLUENE #2
1978 MAR 21

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kh	RADIOM MW/CM2	HCHO VOL L
945	0.	84.3	42.0	11.93	0.274	20.00
1000	15.	84.3	43.5	******	0.264	******
1015	30.	84.3	47.0	******	0.264	******
1030	45.	84.5	46.5	******	0.264	******
1045	60.	85.2	49.5	11.95	0.264	20.00
1100	75.	85.2	50.0	******	******	******
1115	90.	85.7	50.0	******	******	******
1130	105.	85.5	50.5	******	0.266	******
1145	120.	86.2	50.5	12.14	0.266	20.00
1200	135.	85.7	50.5	******	******	******
1215	150.	86.0	50.5	******	******	******
1230	165.	85.7	50.5	******	******	******
1245	180.	86.2	50.5	11.95	0.266	20.00
1300	195.	85.7	50.5	******	0.254	******
1315	210.	85.7	50.5	******	0.256	******
1330	225.	86.2	50.5	******	0.276	******
1345	240.	86.0	50.5	******	0.271	20.00
1400	255.	86.5	50.0	******	0.276	******
1415	270.	86.2	50.5	12.50	0.274	******
1430	285.	86.2	50.0	******	0.266	******
1445	300.	86.2	50.0	12.47	0.283	20.00
1500	315.	86.2	50.0	******	0.278	******
1515	330.	86.5	50.0	******	0.276	******
1530	345.	86.2	50.0	******	0.264	******
1545	360.	86.2	50.0	11.88	0.266	20.00

EC -272
TOLUENE #6
1978 MAR 22

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
TOLUENE AND OXYGENATES MONITORED BY 3-PART COLUMN
0743: EXPAND 0.223 TORR ACETALDEHYDE IN 5.467 L BULB INTO EC
CALCULATED ACETALDEHYDE INJECTED = 0.292 PPM IN EC
TENAX GC SAMPLES TAKEN BEGINNING AT 0955,1015,1115,1215,1312,141561515
EACH TENAX GC SAMPLE 10.8 L
BRADY 291, DASIBI 1212 & TECO 146-1 USED
CO FACTOR 1.45/.166; BECKMAN 6800 MANUAL OPERATION

T=0 AT 915 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.0
REL HUM	%	AVERAGE	45.84
SSPOWER	KW	AVERAGE	11.93
RADIOM	MW/CM2	AVERAGE	0.262
H2O	PPM	AVERAGE	1.825E 04
NO	PPM	INIT COND	0.358
NO2-CORR	PPM	INIT COND	0.080
TOLUENE	PPM	INIT COND	0.580
HCHO	PPM	INIT COND	0.016
ACETALD	PPM	INIT COND	0.361

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.700
430.	1.629
403.	1.499
380.	1.387
370.	1.276
360.	1.114
350.	1.000
340.	0.813
330.	0.568
320.	0.316
310.	0.124
300.	0.019
290.	0.001
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.527 L/MIN

26 GC SAMPLES TAKEN

EC -272
TOLUENE #6
1978 MAR 22

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM
915	0.	0.000	0.398	0.080	0.478	0.580
930	15.	0.000	0.327	0.139	0.468	******
945	30.	0.002	0.260	0.195	0.455	0.509
1000	45.	0.007	0.197	0.241	0.436	******
1015	60.	0.017	0.156	0.265	0.420	0.538
1030	75.	0.027	0.109	0.293	0.399	******
1045	90.	0.039	0.084	0.296	0.379	0.507
1100	105.	0.059	0.064	0.296	0.360	******
1115	120.	0.078	0.049	0.291	0.338	0.518
1130	135.	0.096	0.045	0.273	0.315	******
1145	150.	0.120	0.031	0.264	0.292	0.450
1200	165.	0.139	0.026	0.246	0.270	******
1215	180.	0.161	0.022	0.232	0.252	0.441
1230	195.	0.186	0.022	0.207	0.227	******
1245	210.	0.208	0.015	0.189	0.203	0.425
1300	225.	0.230	0.012	0.170	0.181	******
1315	240.	0.257	0.011	0.147	0.157	0.382
1330	255.	0.281	0.011	0.124	0.133	******
1345	270.	0.305	0.009	0.103	0.109	0.365
1400	285.	0.332	0.007	0.084	0.089	******
1415	300.	0.354	0.006	0.065	0.070	0.347
1430	315.	0.376	0.006	0.047	0.051	******
1445	330.	0.393	0.006	0.032	0.037	0.278
1500	345.	0.403	0.006	0.020	0.023	******
1515	360.	0.410	0.005	0.010	0.015	0.285

EC -272
TOLUENE #6
1978 MAR 22

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	ME-N PPM	O-CRESOL PPM SP-1000	M-CRESOL PPM SP-1000	P-CRESOL PPM SP-1000	UNT PPM SP-1000	MNT PPM SP-1000	PNT PPM SP-1000
915	0.	******	0.000	0.016	0.361	******	******	0.0	0.0002	0.0	0.0	0.0001	0.0000	0.0
930	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
945	30.	******	0.007	******	0.294	******	0.0006	0.0	******	******	******	******	******	******
1000	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	60.	0.19	0.019	0.037	0.228	******	0.0010	0.0008	0.0032	0.0	0.0	0.0001	0.0004	0.0003
1030	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	90.	******	0.029	******	0.192	******	0.0015	******	******	******	******	******	******	******
1100	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	120.	******	0.040	0.073	0.181	******	******	0.0012	0.0026	0.0	0.0	0.0002	0.0009	0.0006
1130	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	150.	******	0.052	******	0.127	0.0018	0.0022	0.0017	******	******	******	******	******	******
1200	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	180.	******	0.059	0.065	0.137	0.0014	0.0038	0.0017	0.0018	0.0	0.0	0.0003	0.0011	0.0006
1230	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	210.	******	0.073	******	0.119	0.0025	0.0037	0.0017	******	******	******	******	******	******
1300	225.	0.37	******	******	******	******	******	******	******	******	******	******	******	******
1315	240.	******	0.067	0.066	0.110	0.0026	0.0042	0.0018	0.0009	0.0	0.0	******	0.0013	0.0010
1330	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	270.	******	0.100	******	0.078	0.0025	0.0043	0.0018	******	******	******	******	******	******
1400	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	300.	0.45	******	0.078	0.067	0.0041	0.0057	0.0018	0.0	0.0	0.0	******	0.0012	0.0009
1430	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	330.	******	0.123	******	0.047	0.0027	0.0037	0.0018	******	******	******	******	******	******
1500	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	360.	0.51	0.132	0.077	0.047	0.0032	0.0048	0.0019	0.0	0.0	0.0	******	0.0011	0.0009

EC -272
TOLUENE #6
1978 MAR 22

CLOCK TIME	ELAPSED T(MIN)	BZALDBZN PPM SP-1000
915	0.	0.0
930	15.	******
945	30.	******
1000	45.	******
1015	60.	0.0088
1030	75.	******
1045	90.	******
1100	105.	******
1115	120.	0.0095
1130	135.	******
1145	150.	******
1200	165.	******
1215	180.	0.0094
1230	195.	******
1245	210.	******
1300	225.	******
1315	240.	0.0121
1330	255.	******
1345	270.	******
1400	285.	******
1415	300.	0.0161
1430	315.	******
1445	330.	******
1500	345.	******
1515	360.	0.0102

EC -272
TOLUENE #6
1978 MAR 22

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
915	0.	83.5	41.0	11.84	0.274	20.00
930	15.	84.3	42.5	******	0.266	******
945	30.	84.3	44.5	******	0.261	******
1000	45.	84.5	46.0	11.91	0.261	******
1015	60.	85.2	47.0	******	0.261	20.00
1030	75.	85.2	47.5	******	0.256	******
1045	90.	85.5	47.5	******	0.259	******
1100	105.	85.7	47.5	******	0.259	******
1115	120.	85.7	47.5	******	0.261	20.00
1130	135.	86.0	47.5	******	0.264	******
1145	150.	86.0	48.0	******	0.264	******
1200	165.	86.0	48.0	******	0.264	******
1215	180.	86.2	47.5	11.84	0.259	20.00
1230	195.	86.0	47.5	******	0.261	******
1245	210.	86.0	47.5	******	0.259	******
1300	225.	86.2	47.5	******	0.259	******
1315	240.	86.2	47.5	11.91	0.264	20.00
1330	255.	86.2	47.5	******	0.261	******
1345	270.	86.0	47.5	******	0.259	******
1400	285.	86.0	47.5	******	0.261	******
1415	300.	86.0	47.5	11.97	0.261	20.00
1430	315.	85.7	47.5	******	0.266	******
1445	330.	86.0	47.5	******	0.264	******
1500	345.	85.7	48.0	******	0.264	******
1515	360.	86.0	48.0	12.09	0.266	20.00

EC -273
TOLUENE #1
1978 MAR 23

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER,TRICHROIC FILTER OUT
TENAX GC SAMPLES TAKEN BEGINNING AT 0825,0925,1045,1145,1245,1345,144561545
EACH TENAX GC SAMPLE 10.8L
TOLUENE AND OXYGENATES MONITORED BY 3-PART COLUMN
BRADY 291, BASIBI 1212, & TECO 148-1 USED
CO FACTOR 1.45/.164; BECKMAN 6800 MANUAL OPERATION

T=0 AT 945 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.5
REL HUM	%	AVERAGE	48.88
SSPOWER	KW	AVERAGE	13.17
RADIOM	MW/CM2	AVERAGE	0.209
H2O	PPM	AVERAGE	2.092E 04
NO	PPM	INIT COND	0.096
NO2-CORR	PPM	INIT COND	0.014
TOLUENE	PPM	INIT COND	0.567
CO	PPM	INIT COND	0.326
HCHO	PPM	INIT COND	0.002
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.003
O-CRESOL	PPM	INIT COND	0.001
P-CRESOL	PPM	INIT COND	0.005
BZALDBZN	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:	WAVELENGTH(NM)	REL. INTENSITY
	500.	1.735
	430.	1.655
	403.	1.530
	380.	1.404
	370.	1.280
	360.	1.114
	350.	1.000
	340.	0.807
	330.	0.564
	320.	0.315
	310.	0.120
	300.	0.018
	290.	0.001
	280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.554 L/MIN

26 GC SAMPLES TAKEN

EC -273
TOLUENE #1
1978 MAR 23

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM
945	0.	0.000	0.096	0.014	0.110	0.567
1000	15.	0.022	0.046	0.052	0.058	******
1015	30.	0.055	0.014	0.064	0.077	0.497
1030	45.	0.166	0.008	0.048	0.054	******
1045	60.	0.200	0.007	0.027	0.033	0.423
1100	75.	0.215	0.006	0.021	0.027	******
1115	90.	0.215	0.006	0.016	0.022	0.406
1130	105.	0.213	0.006	0.016	0.022	******
1145	120.	0.210	0.007	0.012	0.016	0.385
1200	135.	0.210	0.006	0.014	0.018	******
1215	150.	0.208	0.006	0.014	0.019	0.348
1230	165.	0.203	0.006	0.015	0.021	******
1245	180.	0.203	0.006	0.015	0.021	0.334
1300	195.	0.195	0.006	0.015	0.021	******
1315	210.	0.200	0.006	0.016	0.021	0.320
1330	225.	0.200	0.006	0.016	0.020	******
1345	240.	0.196	0.006	0.017	0.021	0.309
1400	255.	0.198	0.006	0.017	0.022	******
1415	270.	0.195	0.005	0.021	0.027	0.288
1430	285.	0.195	0.005	0.019	0.024	******
1445	300.	0.198	0.005	0.020	0.025	0.284
1500	315.	0.193	0.005	0.022	0.028	******
1515	330.	0.193	0.005	0.020	0.025	0.274
1530	345.	0.191	0.006	0.019	0.025	******
1545	360.	0.188	0.006	0.019	0.024	0.255

EC -273
TOLUENE #1
1978 MAR 23

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	O-CRESOL PPM SP-1000	M-CRESOL PPM SP-1000	P-CRESOL PPM SP-1000	ONT PPM SP-1000	MNT PPM SP-1000	PNT PPM SP-1000	BZALDBZN PPM SP-1000
945	0.	0.33	******	0.002	0.0012	0.0004	0.0027	0.0005	0.0003	0.0047	0.0004	0.0	0.0	0.0009
1000	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	******	0.008	******	0.0020	0.0012	0.0064	******	******	******	******	******	******	******
1030	45.	0.36	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.38	0.024	0.006	0.0020	0.0014	0.0098	0.0027	0.0001	0.0053	0.0005	0.0000	0.0003	0.0097
1100	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	90.	******	0.030	******	0.0048	0.0024	0.0166	******	******	******	******	******	******	******
1130	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	0.37	0.032	0.004	0.0045	0.0020	0.0115	0.0027	0.0001	0.0056	0.0005	0.0003	0.0005	0.0111
1200	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	******	0.030	******	0.0047	0.0019	0.0097	******	******	******	******	******	******	******
1230	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	******	0.031	0.008	0.0055	0.0021	0.0131	0.0024	0.0001	0.0052	0.0005	0.0001	0.0003	0.0117
1300	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	******	0.031	******	0.0062	0.0022	0.0163	******	******	******	******	******	******	******
1330	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	0.57	0.029	0.009	0.0066	0.0027	0.0200	0.0027	0.0002	0.0054	0.0006	0.0001	0.0003	0.0156
1400	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	******	0.028	******	0.0061	0.0020	0.0118	******	******	******	******	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.63	0.028	0.012	0.0066	0.0024	0.0150	0.0018	0.0001	0.0040	0.0004	0.0001	0.0002	0.0123
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	******	0.028	******	0.0083	0.0027	0.0159	******	******	******	******	******	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	0.67	0.028	0.017	0.0075	0.0022	0.0151	0.0013	0.0001	0.0046	0.0006	0.0001	0.0003	0.0116

EC -273
TOLUENE #1
1978 MAR 23

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM MW/CM2	HCHO VOL L
945	0.	65.0	41.5	13.30	******	20.00
1000	15.	68.4	42.5	******	0.271	******
1015	30.	87.7	44.0	13.17	0.261	******
1030	45.	87.4	45.0	******	0.256	******
1045	60.	87.0	46.5	13.19	0.256	20.00
1100	75.	88.2	47.0	******	0.269	******
1115	90.	87.7	48.0	******	0.269	******
1130	105.	88.2	48.5	13.55	0.266	******
1145	120.	89.2	48.0	13.48	0.264	20.00
1200	135.	87.7	46.0	******	0.261	******
1215	150.	86.5	49.0	******	0.264	******
1230	165.	86.5	50.5	******	0.261	******
1245	180.	86.5	51.0	13.34	0.259	20.00
1300	195.	87.0	51.5	******	0.269	******
1315	210.	86.7	51.5	******	0.269	******
1330	225.	86.7	51.5	******	0.269	******
1345	240.	87.0	52.0	13.56	0.266	20.00
1400	255.	86.7	52.0	******	0.266	******
1415	270.	86.0	52.0	******	0.313	******
1430	285.	86.0	52.0	******	0.310	******
1445	300.	86.0	52.0	13.84	0.315	20.00
1500	315.	84.8	52.0	12.02	0.261	******
1515	330.	84.8	52.0	******	0.264	******
1530	345.	85.0	52.0	******	0.266	******
1545	360.	84.8	52.0	12.24	0.266	20.00

EC -27e
PROPENE #6
1978 MAR 29

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
GRAUV 291, CASIBI 1212 & TECO 148-1 USED
CJ FACTOR: 1.45/.086

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.7
REL HUM	%	AVERAGE	44.65
SSPOWER	KW	AVERAGE	12.11
RADIOM	MW/CM2	AVERAGE	0.262
H2O	PPM	AVERAGE	1.837E 04
NO	PPM	INIT COND	0.410
NO2-CORR	PPM	INIT COND	0.106
PROPENE	PPM	INIT COND	0.540
CO	PPM	INIT COND	0.260
HCHO	PPM	INIT COND	0.015
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.703
490.	1.617
480.	1.487
380.	1.389
370.	1.274
360.	1.106
350.	1.000
340.	0.802
330.	0.555
320.	0.311
310.	0.119
300.	0.017
290.	0.001
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.732 L/MIN

50 GC SAMPLES TAKEN

EC -276
PROPENE #6
1978 MAR 29

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
907	-23.	******	******	******	******	0.535
930	0.	0.000	0.410	0.106	0.517	0.540
945	15.	0.000	0.348	0.158	0.506	0.498
1000	30.	0.000	0.299	0.205	0.503	0.467
1015	45.	0.002	0.249	0.250	0.499	******
1030	60.	0.007	0.202	0.287	0.487	0.400
1045	75.	0.015	0.162	0.313	0.473	0.365
1100	90.	0.022	0.125	0.336	0.462	0.338
1115	105.	0.032	0.098	0.354	0.450	0.310
1130	120.	0.054	0.073	0.364	0.438	0.284
1145	135.	0.073	0.056	0.366	0.420	0.257
1200	150.	0.095	0.051	0.353	0.404	0.232
1215	165.	0.120	0.035	0.353	0.389	0.208
1230	180.	0.142	0.031	0.339	0.368	0.183
1245	195.	0.169	0.027	0.322	0.348	0.161
1300	210.	0.193	0.022	0.305	0.326	0.140
1315	225.	0.213	0.020	0.291	0.308	0.124
1330	240.	0.232	0.016	0.275	0.289	0.106
1345	255.	0.254	0.016	0.255	0.268	0.091
1400	270.	0.271	0.012	0.235	0.247	0.077
1415	285.	0.293	0.011	0.217	0.228	0.065
1430	300.	0.310	0.010	0.202	0.210	0.055
1445	315.	0.325	0.013	0.184	0.196	0.046
1500	330.	0.342	0.007	0.166	0.173	0.038
1515	345.	0.359	0.009	0.150	0.157	0.031
1530	360.	0.374	0.009	0.136	0.141	0.026

EC -276
PROPENE #6
1976 MAR 29

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM
907	-23.	******	******	******	******	******	******	******	******	******	******
930	0.	0.26	0.000	0.015	0.001	******	0.0009	0.0001	0.0001	0.0000	0.0
945	15.	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.000	******	0.042	0.0001	0.0006	******	0.0001	******	0.0
1015	45.	******	******	******	******	******	******	******	******	******	******
1030	60.	0.27	0.002	0.062	0.087	0.0006	0.0016	0.0001	0.0001	******	0.0
1045	75.	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.007	******	0.120	0.0008	0.0021	0.0002	0.0001	******	0.0001
1115	105.	******	******	******	******	******	******	******	******	******	******
1130	120.	0.27	0.013	0.115	0.151	0.0012	0.0028	0.0003	0.0001	******	0.0004
1145	135.	******	******	******	******	******	******	******	******	******	******
1200	150.	******	0.021	******	0.161	0.0012	0.0029	0.0004	0.0001	******	0.0005
1215	165.	******	******	******	******	******	******	******	******	******	******
1230	180.	0.37	0.030	0.163	0.182	0.0017	0.0052	0.0007	0.0002	0.0007	0.0004
1245	195.	******	******	******	******	******	******	******	******	******	******
1300	210.	******	0.044	******	0.153	0.0016	0.0024	0.0006	0.0002	******	0.0009
1315	225.	******	******	******	******	******	******	******	******	******	******
1330	240.	0.45	******	0.159	0.192	0.0020	0.0063	0.0010	0.0002	0.0011	0.0009
1345	255.	******	******	******	******	******	******	******	******	******	******
1400	270.	******	0.067	******	0.160	0.0014	0.0029	0.0008	0.0002	******	0.0011
1415	285.	******	******	******	******	******	******	******	******	******	******
1430	300.	******	0.078	0.146	0.165	0.0025	0.0072	0.0013	0.0003	0.0010	0.0011
1445	315.	0.45	******	******	******	******	******	******	******	******	******
1500	330.	******	******	******	0.167	0.0025	0.0080	0.0014	0.0004	0.0016	0.0013
1515	345.	******	******	******	******	******	******	******	******	******	******
1530	360.	0.66	0.100	0.192	0.156	0.0025	0.0061	0.0014	0.0004	0.0013	0.0013

EC -276
PROPENE #6
1978 MAR 29

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
907	-23.	******	******	******	******	******
930	0.	85.0	39.5	11.75	0.259	20.00
945	15.	83.8	41.5	******	0.264	******
1000	30.	83.8	43.5	******	0.261	******
1015	45.	84.5	44.5	******	******	******
1030	60.	85.0	45.5	12.17	0.264	20.00
1045	75.	85.5	45.5	******	0.264	******
1100	90.	85.7	45.5	******	0.264	******
1115	105.	85.7	45.5	******	0.261	******
1130	120.	85.7	46.0	12.21	0.266	20.00
1145	135.	86.0	46.0	******	0.259	******
1200	150.	85.7	46.0	******	0.266	******
1215	165.	86.0	46.0	******	0.264	******
1230	180.	85.7	46.0	12.06	0.264	20.00
1245	195.	86.0	46.0	******	******	******
1300	210.	86.0	46.0	******	******	******
1315	225.	86.0	46.0	******	******	******
1330	240.	86.0	46.0	12.30	0.269	20.00
1345	255.	86.0	46.0	******	******	******
1400	270.	86.5	46.0	******	******	******
1415	285.	86.2	46.0	******	******	******
1430	300.	86.2	46.0	12.26	0.264	20.00
1445	315.	86.2	46.0	******	0.264	******
1500	330.	86.7	45.5	******	0.261	******
1515	345.	86.2	46.0	******	0.259	******
1530	360.	86.2	45.5	12.02	0.259	20.00

EC -277
PROPENE #1
1978 MAR 30

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER ; TRICHROIC FILTER OUT
BRADY 291, DASIBI 1212 & TECO 148-1 USED;
CO FACTOR: 1.45/.087

T=0 AT 915 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.6
REL HUM	%	AVERAGE	47.14
SSPOWER	KW	AVERAGE	12.21
RADIOM	MW/CM2	AVERAGE	0.262
H2O	PPM	AVERAGE	1.939E 04
NO	PPM	INIT COND	0.098
NO2-CORR	PPM	INIT COND	0.010
PROPENE	PPM	INIT COND	0.564
CO	PPM	INIT COND	0.225
HCHO	PPM	INIT COND	0.005
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.763
430.	1.651
403.	1.522
380.	1.407
370.	1.282
360.	1.122
350.	1.000
340.	0.816
330.	0.562
320.	0.311
310.	0.118
300.	0.017
290.	0.001
280.	0.000
270.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.677 L/MIN

50 GC SAMPLES TAKEN

EC -277
PROPENE #1
1978 MAR 30

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
903	-12.	******	******	******	******	0.559
915	0.	0.000	0.058	0.010	0.108	0.564
930	15.	0.012	0.046	0.058	0.104	0.497
945	30.	0.056	0.018	0.085	0.103	0.453
1000	45.	0.125	0.011	0.077	0.087	0.388
1015	60.	0.193	0.008	0.067	0.075	0.336
1030	75.	0.239	0.007	0.055	0.063	0.278
1045	90.	0.278	0.007	0.045	0.052	0.232
1100	105.	0.298	0.006	0.036	0.042	0.195
1115	120.	0.308	0.006	0.028	0.033	0.166
1130	135.	0.313	0.006	0.019	0.026	0.142
1145	150.	0.310	0.005	0.013	0.018	0.123
1200	165.	0.310	0.006	0.013	0.018	0.106
1215	180.	0.305	0.005	0.012	0.017	0.093
1230	195.	0.300	0.005	0.012	0.018	0.081
1245	210.	0.300	0.005	0.012	0.017	0.071
1300	225.	0.296	0.005	0.014	0.019	0.062
1315	240.	0.296	0.005	0.016	0.020	0.055
1330	255.	0.293	0.005	0.015	0.018	0.048
1345	270.	0.293	0.004	0.012	0.016	0.042
1400	285.	0.293	0.004	0.016	0.020	0.036
1415	300.	0.293	0.004	0.014	0.018	0.032
1430	315.	0.293	0.004	0.014	0.018	0.028
1445	330.	0.291	0.004	0.014	0.018	0.024
1500	345.	0.293	0.004	0.013	0.017	0.021
1515	360.	0.296	0.004	0.014	0.018	0.019

EC -277
PROPENE #1
1978 MAR 30

CLOCK TIME	ELAPSED TIMIN)	CO PPM	[illegible] PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM
903	-12.	******	******	******	******	******	******	******	******	******
915	0.	0.23	0.000	0.005	0.001	******	0.0008	0.0001	0.0001	0.0000
930	15.	******	******	******	******	******	******	******	******	******
945	30.	******	0.003	******	0.068	0.0002	0.0023	0.0003	0.0001	******
1000	45.	******	******	******	******	******	******	******	******	******
1015	60.	0.32	0.021	0.127	0.135	0.0012	0.0062	0.0007	0.0001	******
1030	75.	******	******	******	******	******	******	******	******	******
1045	90.	******	******	******	0.172	0.0014	0.0065	0.0010	0.0002	******
1100	105.	******	******	******	******	******	******	******	******	******
1115	120.	0.38	0.052	0.212	0.166	0.0012	0.0041	0.0010	0.0002	******
1130	135.	******	******	******	******	******	******	******	******	******
1145	150.	******	0.067	******	0.191	0.0014	0.0043	0.0011	0.0002	******
1200	165.	******	******	******	******	******	******	******	******	******
1215	180.	0.48	0.069	0.212	0.192	0.0015	0.0066	0.0012	0.0003	******
1230	195.	******	******	******	******	******	******	******	******	******
1245	210.	******	0.070	******	0.189	0.0016	0.0083	0.0013	0.0003	******
1300	225.	******	******	******	******	******	******	******	******	******
1315	240.	0.60	0.069	******	0.190	0.0015	0.0080	0.0012	0.0003	******
1330	255.	******	******	******	******	******	******	******	******	******
1345	270.	******	0.074	******	0.176	0.0017	0.0072	0.0012	0.0003	******
1400	285.	******	******	******	******	******	******	******	******	******
1415	300.	0.66	0.074	0.195	0.168	0.0016	0.0040	0.0012	0.0004	******
1430	315.	******	******	******	******	******	******	******	******	******
1445	330.	******	0.075	******	0.170	0.0017	0.0085	0.0013	0.0004	******
1500	345.	******	******	******	******	******	******	******	******	******
1515	360.	0.60	0.077	0.189	0.131	0.0016	0.0033	0.0009	0.0003	******

EC -277
PROPENE #1
1978 MAR 30

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
903	-12.	******	******	******	******	******
915	0.	84.5	42.0	12.10	0.259	20.00
930	15.	84.0	43.0	12.17	0.269	******
945	30.	84.8	45.5	******	******	******
1000	45.	85.0	46.5	******	******	******
1015	60.	86.0	47.5	12.02	0.256	20.00
1030	75.	86.2	48.0	******	0.271	******
1045	90.	86.0	48.5	******	0.264	******
1100	105.	85.7	49.0	******	0.261	******
1115	120.	85.7	49.0	12.41	0.264	20.00
1130	135.	86.2	49.0	******	0.261	******
1145	150.	86.2	49.0	******	0.259	******
1200	165.	86.2	49.0	******	0.264	******
1215	180.	86.0	49.5	12.64	0.264	20.00
1230	195.	86.5	49.5	******	******	******
1245	210.	86.0	49.5	******	******	******
1300	225.	86.2	49.5	******	******	******
1315	240.	86.2	49.5	12.26	0.261	******
1330	255.	86.5	49.5	******	0.269	******
1345	270.	86.7	49.0	******	******	******
1400	285.	86.5	49.0	******	******	******
1415	300.	86.2	49.0	12.38	0.264	20.00
1430	315.	86.5	49.0	******	0.256	******
1445	330.	86.2	49.0	******	******	******
1500	345.	86.7	49.0	******	******	******
1515	360.	86.2	49.0	12.30	0.261	20.00

EC -278
PROPENE #2
1978 MAR 31

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
GRADY 291, DASIBI 1212 & TECO 148-1 USED
CO FACTOR: 1.45/.086; BECKMAN 6800 ON MANUAL OPERATION

T=0 AT 915 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.7
REL HUM	%	AVERAGE	46.30
SSPOWER	KW	AVERAGE	12.35
RADIOM	MW/CM2	AVERAGE	0.263
H2O	PPM	AVERAGE	1.900E 04
NO	PPM	INIT COND	0.366
NO2-CORR	PPM	INIT COND	0.128
PROPENE	PPM	INIT COND	1.016
HCHO	PPM	INIT COND	0.008

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.707
430.	1.642
403.	1.511
380.	1.408
370.	1.271
360.	1.115
350.	1.000
340.	0.807
330.	0.558
320.	0.316
310.	0.120
300.	0.017
290.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.733 L/MIN

52 GC SAMPLES TAKEN

EC -278
PROPENE #2
1978 MAR 31

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM LOOP	PROPENE PPM TRAP
900	-15.	******	******	******	******	0.999	******
915	0.	0.000	0.366	0.128	0.498	1.016	******
930	15.	0.000	0.248	0.234	0.482	0.929	******
945	30.	0.015	0.151	0.320	0.473	0.848	******
1000	45.	0.056	0.077	0.371	0.448	0.773	******
1015	60.	0.134	0.037	0.365	0.419	0.683	******
1030	75.	0.225	0.022	0.356	0.377	0.582	******
1045	90.	0.330	0.015	0.315	0.329	******	******
1100	105.	0.420	0.011	0.259	0.268	******	******
1115	120.	0.493	0.010	0.201	0.209	0.296	******
1130	135.	0.542	0.007	0.140	0.145	0.226	******
1145	150.	0.586	0.006	0.084	0.089	******	0.181
1200	165.	0.611	0.010	0.047	0.057	******	******
1215	180.	0.623	0.006	0.020	0.024	******	0.107
1230	195.	0.625	0.006	0.010	0.015	******	0.084
1245	210.	0.620	0.006	-0.001	0.004	******	0.061
1300	225.	0.611	0.006	-0.015	-0.011	******	0.052
1315	240.	0.601	0.006	-0.021	-0.018	******	0.041
1330	255.	0.594	0.006	-0.025	-0.020	******	0.034
1345	270.	0.586	0.005	-0.019	-0.018	******	0.027
1400	285.	0.581	0.005	-0.015	-0.012	******	0.023
1415	300.	0.574	0.005	-0.009	-0.007	******	0.018
1430	315.	0.569	0.005	-0.018	-0.013	******	0.015
1445	330.	0.564	0.005	-0.024	-0.019	******	0.012
1500	345.	0.564	0.005	-0.020	-0.016	******	0.010
1515	360.	0.559	0.004	-0.017	-0.015	******	0.008

EC -278
PROPENE #2
1978 MAR 31

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM
900	-15.	0.03	******	******	******	******	******	******	******	******	******
915	0.	******	0.000	0.008	0.000	0.0001	0.0003	0.0000	0.0000	0.0	0.0
930	15.	******	******	******	******	******	******	******	******	******	******
945	30.	******	0.003	******	0.113	0.0006	0.0011	0.0001	0.0000	******	0.0
1000	45.	******	******	******	******	******	******	******	******	******	******
1015	60.	0.12	0.021	0.261	0.168	0.0010	0.0018	0.0003	0.0001	******	0.0004
1030	75.	******	******	******	******	******	******	******	******	******	******
1045	90.	******	0.056	******	0.275	0.0023	0.0033	0.0007	0.0001	******	0.0009
1100	105.	******	******	******	******	******	******	******	******	******	******
1115	120.	0.27	0.109	0.417	0.336	0.0018	0.0056	0.0011	0.0001	******	0.0011
1130	135.	******	******	******	******	******	******	******	******	******	******
1145	150.	******	0.185	******	0.378	0.0024	0.0077	0.0015	0.0001	******	0.0006
1200	165.	******	******	******	******	******	******	******	******	******	******
1215	180.	0.49	0.225	0.438	0.323	0.0013	0.0053	0.0013	0.0001	******	0.0009
1230	195.	******	******	******	******	******	******	******	******	******	******
1245	210.	******	0.235	******	0.517	0.0018	0.0049	0.0014	******	******	0.0006
1300	225.	******	******	******	******	******	******	******	******	******	******
1315	240.	0.66	0.260	0.423	0.348	0.0037	0.0087	0.0020	0.0003	******	0.0012
1330	255.	******	******	******	******	******	******	******	******	******	******
1345	270.	******	******	******	0.258	0.0012	0.0053	0.0014	0.0002	******	******
1400	285.	******	******	******	******	******	******	******	******	******	******
1415	300.	0.79	0.235	0.395	0.277	0.0018	0.0046	0.0014	0.0003	******	0.0012
1430	315.	******	******	******	******	******	******	******	******	******	******
1445	330.	******	0.245	******	0.300	0.0029	0.0128	0.0021	0.0003	******	0.0009
1500	345.	******	******	******	******	******	******	******	******	******	******
1515	360.	0.86	0.240	0.373	0.284	0.0028	0.0132	0.0021	0.0005	0.0018	0.0009

EC -278
PROPENE #2
1978 MAR 31

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
900	-15.	******	******	******	******	******
915	0.	85.5	41.0	12.21	0.261	20.00
930	15.	84.0	42.5	******	0.261	******
945	30.	84.0	45.0	******	0.261	******
1000	45.	84.3	46.5	******	0.256	******
1015	60.	85.0	47.5	12.19	0.261	20.00
1030	75.	85.5	48.0	12.41	******	******
1045	90.	85.7	48.5	******	******	******
1100	105.	85.2	49.0	******	******	******
1115	120.	85.7	49.0	12.34	0.266	20.00
1130	135.	85.7	49.0	******	******	******
1145	150.	85.2	49.0	******	******	******
1200	165.	85.5	49.0	******	******	******
1215	180.	85.7	49.0	12.38	0.264	20.00
1230	195.	85.7	49.0	******	0.261	******
1245	210.	85.7	49.0	******	0.261	******
1300	225.	85.7	49.5	******	0.261	******
1315	240.	85.7	49.5	12.46	0.266	20.00
1330	255.	86.0	49.5	******	0.266	******
1345	270.	86.2	49.0	******	0.261	******
1400	285.	85.7	49.5	******	0.261	******
1415	300.	86.0	49.0	12.38	0.261	20.00
1430	315.	85.5	49.0	******	0.264	******
1445	330.	85.7	49.0	******	******	******
1500	345.	86.0	49.0	******	******	******
1515	360.	86.0	49.0	12.41	0.266	20.00

EC -274
PROPENE #3
1978 APR 3

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
BRADY 291, BASIBI 1212 & TECO 148-1 USED
CO FACTOR 1.45/.101

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.5
REL HUM	%	AVERAGE	48.11
SSPOWER	KW	AVERAGE	12.38
RADIOM	MW/CM2	AVERAGE	0.202
H2O	PPM	AVERAGE	1.546E 04
NO	PPM	INIT COND	0.730
NO2-CORR	PPM	INIT COND	0.244
PROPENE	PPM	INIT COND	1.144
HCHO	PPM	INIT COND	0.016
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.748
430.	1.666
403.	1.524
380.	1.417
370.	1.295
360.	1.125
350.	1.000
340.	0.501
330.	0.562
320.	0.315
310.	0.120
300.	0.018
290.	0.001
280.	0.0

K1=0.35 MIN-1

SAMPLING RATE = 1.732 L/MIN

50 GC SAMPLES TAKEN

EC -279
PROPENE #3
1976 APR 3

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM LOOP	PROPENE PPM TRAP
915	-15.	******	******	******	******	1.152	******
930	0.	0.000	0.730	0.244	0.977	1.144	******
945	15.	0.000	0.613	0.348	0.957	1.058	******
1000	30.	0.000	0.498	0.448	0.946	0.983	******
1015	45.	0.000	0.396	0.530	0.924	0.923	******
1030	60.	0.002	0.303	0.595	0.898	0.855	******
1045	75.	0.012	0.222	0.655	0.875	0.788	******
1100	90.	0.034	0.154	0.693	0.842	0.728	******
1115	105.	0.068	0.100	0.705	0.805	0.657	******
1130	120.	0.110	0.078	0.696	0.771	0.588	******
1145	135.	0.164	0.049	0.671	0.722	0.519	******
1200	150.	0.225	0.044	0.631	0.672	0.455	******
1215	165.	0.276	0.044	0.569	0.611	0.379	******
1230	180.	0.330	0.032	0.512	0.547	0.324	******
1245	195.	0.381	0.020	0.467	0.479	0.262	******
1300	210.	0.425	0.017	0.406	0.416	******	0.225
1315	225.	0.467	0.012	0.339	0.349	******	0.179
1330	240.	0.506	0.012	0.274	0.283	******	0.141
1345	255.	0.540	0.010	0.259	0.268	******	0.111
1400	270.	0.569	0.007	0.251	0.256	******	0.087
1415	285.	0.598	0.007	0.183	0.191	******	0.068
1430	300.	0.628	0.007	0.116	0.123	******	0.052
1445	315.	0.645	0.007	0.056	0.061	******	0.040
1500	330.	0.662	0.007	-0.002	0.003	******	0.030
1515	345.	0.674	0.007	-0.009	-0.004	******	0.024
1530	360.	0.677	0.007	-0.011	-0.006	******	0.018

EC -279
PROPENE #3
1978 APR 3

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM
915	-15.	0.14	******	******	******	******	******	******	******	******	******
930	0.	******	0.000	0.016	0.001	0.0004	0.0017	0.0004	0.0001	******	0.0
945	15.	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.001	******	0.095	0.0007	0.0007	0.0001	0.0001	******	0.0
1015	45.	******	******	******	******	******	******	******	******	******	******
1030	60.	0.32	0.008	0.192	0.175	0.0015	0.0010	0.0001	0.0001	******	0.0004
1045	75.	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.019	******	0.250	0.0023	0.0017	0.0002	0.0001	******	0.0009
1115	105.	******	******	******	******	******	******	******	******	******	******
1130	120.	******	0.038	0.348	0.306	0.0029	0.0021	0.0003	0.0001	0.0017	0.0016
1145	135.	******	******	******	******	******	******	******	******	******	******
1200	150.	******	0.068	******	0.370	0.0030	0.0051	0.0006	******	0.0033	0.0020
1215	165.	******	******	******	******	******	******	******	******	******	******
1230	180.	0.79	0.107	0.465	0.425	0.0052	0.0079	0.0004	0.0001	0.0046	0.0031
1245	195.	******	******	******	******	******	******	******	******	******	******
1300	210.	******	0.150	******	0.434	0.0035	0.0071	0.0011	0.0002	******	0.0031
1315	225.	******	******	******	******	******	******	******	******	******	******
1330	240.	0.95	0.202	0.522	0.470	0.0048	0.0163	0.0016	0.0002	0.0068	0.0032
1345	255.	******	******	******	******	******	******	******	******	******	******
1400	270.	******	0.160	******	0.369	0.0018	0.0085	0.0009	0.0002	0.0034	0.0019
1415	285.	******	******	******	******	******	******	******	******	******	******
1430	300.	1.25	******	0.471	0.325	0.0045	0.0067	0.0012	0.0002	0.0015	0.0033
1445	315.	******	******	******	******	******	******	******	******	******	******
1500	330.	******	0.340	******	0.308	0.0020	0.0078	0.0013	0.0003	0.0029	0.0036
1515	345.	******	******	******	******	******	******	******	******	******	******
1530	360.	1.48	0.335	0.436	0.284	0.0024	0.0093	0.0016	0.0003	0.0034	0.0036

EC -279
PROPENE #3
1978 APR 3

CLOCK TIME	ELAPSEC T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM MW/CM2	HCHO VOL L
915	-15.	******	******	******	******	******
930	0.	84.3	41.0	12.28	0.254	20.00
945	15.	84.3	42.5	******	0.261	******
1000	30.	83.8	45.0	******	0.266	******
1015	45.	84.3	46.5	******	0.256	******
1030	60.	84.5	47.5	12.30	0.259	20.00
1045	75.	85.0	48.0	******	0.259	******
1100	90.	85.2	48.5	******	0.266	******
1115	105.	85.5	49.0	******	0.261	******
1130	120.	85.5	49.0	12.34	0.256	20.00
1145	135.	85.7	49.5	******	0.269	******
1200	150.	86.0	49.5	******	0.261	******
1215	165.	85.5	49.5	******	******	******
1230	180.	86.0	49.5	12.45	0.264	20.00
1245	195.	85.7	49.5	******	******	******
1300	210.	86.0	49.5	******	******	******
1315	225.	85.7	49.5	******	******	******
1330	240.	85.5	50.0	12.34	0.266	20.00
1345	255.	85.7	50.0	******	******	******
1400	270.	86.0	50.0	******	******	******
1415	285.	85.7	50.0	******	0.234	******
1430	300.	85.7	49.5	12.41	0.264	20.00
1445	315.	86.2	50.0	******	******	******
1500	330.	85.7	50.0	******	******	******
1515	345.	86.0	49.5	******	******	******
1530	360.	85.7	49.5	12.52	0.269	20.00

EC -285
ETHENE
1976 APR 25

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
BRADY 291, DAISBI 1212 & TECO 148-1 USED
CO FACTOR 1.45/14.7

T=0 AT 945 EST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.2
REL HUM	%	AVERAGE	43.20
SSPOWER	KW	AVERAGE	12.70
RADIUM	MW/CM2	AVERAGE	0.263
H2O	PPM	AVERAGE	1.851E 04
NO	PPM	INIT COND	0.791
NO2-CORR	PPM	INIT COND	0.215
ETHENE	PPM	INIT COND	1.949
HCHO	PPM	INIT COND	0.015
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.616
430.	1.589
403.	1.493
380.	1.400
370.	1.282
360.	1.114
350.	1.000
340.	0.807
330.	0.559
320.	0.312
310.	0.119
300.	0.017
290.	0.001
280.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.730 L/MIN

47 GC SAMPLES TAKEN

EC -285
ETHENE
1978 APR 25

CLOCK TIME	ELAPSED T(MIN)	OZLNE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM
930	-15.	******	******	******	******	1.949
945	0.	0.000	0.791	0.215	1.006	1.949
1000	15.	0.000	0.706	0.285	0.989	1.877
1015	30.	0.000	0.625	0.356	0.979	1.811
1030	45.	0.000	0.542	0.412	0.962	1.771
1045	60.	0.000	0.447	0.500	0.945	1.712
1100	75.	0.002	0.371	0.556	0.925	1.645
1115	90.	0.010	0.332	0.576	0.903	1.615
1130	105.	0.017	0.237	0.646	0.878	1.540
1145	120.	0.029	0.181	0.680	0.858	1.486
1200	135.	0.051	0.134	0.697	0.829	1.452
1215	150.	0.076	0.098	0.709	0.804	1.398
1230	165.	0.108	0.071	0.711	0.774	1.347
1245	180.	0.149	0.051	0.698	0.745	1.301
1300	195.	0.193	0.042	0.666	0.705	1.239
1315	210.	0.242	0.032	0.636	0.665	1.187
1330	225.	0.286	0.022	0.603	0.623	1.126
1345	240.	0.349	0.020	0.559	0.576	1.071
1400	255.	0.403	0.015	0.514	0.526	1.017
1415	270.	0.469	0.015	0.462	0.474	0.954
1430	285.	0.537	0.010	0.409	0.414	0.903
1445	300.	0.606	0.007	0.347	0.354	0.843
1500	315.	0.677	0.005	0.292	0.292	******
1515	330.	0.738	0.005	0.241	0.244	0.708
1530	345.	0.799	0.002	0.196	0.199	0.655
1545	360.	0.840	0.007	0.173	0.175	0.590

EC -285
ETHENE
1978 APR 25

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM
930	-15.	0.70	******	******	******	******	******	******	******	******
945	0.	******	0.000	0.015	0.0010	******	0.0011	0.0001	0.0002	0.0
1000	15.	******	******	******	******	******	******	******	******	******
1015	30.	******	0.000	******	0.0017	******	0.0011	0.0001	0.0001	0.0
1030	45.	******	******	******	******	******	******	******	******	******
1045	60.	0.79	0.000	0.244	0.0024	******	0.0017	0.0002	0.0001	0.0
1100	75.	******	******	******	******	******	******	******	******	******
1115	90.	******	0.001	******	0.0028	******	0.0017	0.0002	0.0000	0.0
1130	105.	******	******	******	******	******	******	******	******	******
1145	120.	0.90	0.001	0.427	0.0040	0.0006	0.0038	0.0003	******	0.0003
1200	135.	******	******	******	******	******	******	******	******	******
1215	150.	******	0.002	******	0.0041	******	0.0031	0.0003	0.0000	0.0004
1230	165.	******	******	******	******	******	******	******	******	******
1245	180.	1.05	0.002	0.533	0.0050	0.0008	******	0.0007	0.0000	******
1300	195.	******	******	******	******	******	******	******	******	******
1315	210.	******	0.004	******	0.0057	0.0006	0.0061	0.0009	******	0.0006
1330	225.	******	******	******	******	******	******	******	******	******
1345	240.	1.28	0.005	0.622	0.0074	0.0033	0.0120	0.0016	0.0001	0.0007
1400	255.	******	******	******	******	******	******	******	******	******
1415	270.	******	0.007	******	0.0072	******	0.0086	0.0014	******	0.0007
1430	285.	******	******	******	******	******	******	******	******	******
1445	300.	1.60	0.009	0.886	0.0090	******	0.0178	0.0023	******	0.0009
1500	315.	******	******	******	******	******	******	******	******	******
1515	330.	******	0.012	******	0.0087	******	0.0146	0.0021	******	0.0009
1530	345.	******	******	******	******	******	******	******	******	******
1545	360.	1.93	0.014	0.709	0.0101	******	0.0140	0.0028	******	0.0009

EC -285
ETHENE
1978 APR 25

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM MW/CM2	HCHO VOL L
930	-15.	******	******	******	******	******
945	0.	84.5	41.0	12.75	0.274	20.00
1000	15.	85.2	42.5	12.64	0.271	******
1015	30.	85.2	45.0	******	0.261	******
1030	45.	85.2	47.0	******	0.261	******
1045	60.	86.0	48.0	12.50	0.259	20.00
1100	75.	86.2	48.5	******	******	******
1115	90.	86.7	49.0	******	******	******
1130	105.	86.7	49.0	******	******	******
1145	120.	86.7	49.0	12.64	0.266	20.00
1200	135.	86.7	49.0	******	******	******
1215	150.	87.0	49.0	******	******	******
1230	165.	86.7	49.0	******	******	******
1245	180.	86.7	49.0	12.63	0.261	20.00
1300	195.	86.7	49.0	******	0.261	******
1315	210.	86.7	49.0	******	0.261	******
1330	225.	87.0	49.0	******	0.261	******
1345	240.	87.0	49.0	12.64	0.259	20.00
1400	255.	87.2	49.0	******	******	******
1415	270.	87.0	49.0	******	******	******
1430	285.	87.0	49.0	******	******	******
1445	300.	87.0	49.0	12.75	0.264	20.00
1500	315.	86.7	49.0	******	0.261	******
1515	330.	87.0	49.0	******	0.261	******
1530	345.	87.0	48.5	******	0.266	******
1545	360.	87.2	48.5	13.00	0.266	20.00

EC -286
ETHENE
1978 APR 26

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
BRADY 291, DAISBI 1212 & TECO 148-1 USED
CO FACTOR 1.45/15.3

T=0 AT 915 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.9
REL HUM	%	AVERAGE	43.05
SSPOWER	KW	AVERAGE	12.69
RADICM	MW/CM2	AVERAGE	0.263
H2O	PPM	AVERAGE	1.845E 04
NO	PPM	INIT COND	0.708
NO2-CORR	PPM	INIT COND	0.237
ETHENE	PPM	INIT COND	3.758
HCHO	PPM	INIT COND	0.014
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.738
430.	1.701
403.	1.538
380.	1.393
370.	1.241
360.	1.139
350.	1.000
340.	0.818
330.	0.566
320.	0.316
310.	0.119
300.	0.017
290.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.731 L/MIN

48 GC SAMPLES TAKEN

EC -286
ETHENE
1978 APR 26

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM
900	-15.	******	******	******	******	3.812
915	0.	0.000	C.708	0.237	0.947	3.758
930	15.	0.000	C.520	0.405	0.923	3.651
945	30.	0.005	0.320	0.579	0.899	3.511
1000	45.	0.027	0.171	0.703	0.871	3.338
1015	60.	0.100	0.076	0.756	0.832	3.247
1030	75.	0.215	C.042	0.743	0.782	3.074
1045	90.	0.366	0.020	0.696	0.713	2.908
1100	105.	0.537	C.012	C.620	0.627	2.764
1115	120.	0.716	C.010	0.516	0.521	2.564
1130	135.	0.870	0.002	0.410	0.410	2.382
1145	150.	0.994	0.005	0.314	0.314	2.167
1200	165.	1.065	0.002	0.237	0.240	1.972
1215	180.	1.080	0.005	0.177	0.180	1.819
1230	195.	1.067	0.002	0.147	0.147	1.685
1245	210.	1.041	C.005	0.124	0.127	1.567
1300	225.	1.004	C.002	0.116	0.116	1.481
1315	240.	0.962	0.002	0.108	0.108	1.390
1330	255.	0.918	C.007	0.106	0.110	1.322
1345	270.	0.879	0.002	0.100	0.103	1.239
1400	285.	0.838	C.002	C.100	0.100	1.189
1415	300.	0.804	0.002	0.099	0.099	1.129
1430	315.	0.767	C.002	0.099	0.099	1.058
1445	330.	0.735	C.002	0.096	0.096	1.019
1500	345.	0.706	0.002	0.096	0.096	0.972
1515	360.	0.682	0.002	0.095	0.095	0.927

EC -286
ETHENE
1978 APR 26

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM
900	-15.	0.18	******	******	******	******	******	******	******	******
915	0.	******	0.000	0.014	0.0007	0.0000	0.0008	0.0001	0.0000	0.0
930	15.	******	******	******	******	******	******	******	******	******
945	30.	******	0.000	******	0.0014	******	0.0015	0.0001	0.0000	0.0
1000	45.	******	******	******	******	******	******	******	******	******
1015	60.	0.24	0.001	0.571	0.0022	0.0001	0.0026	0.0003	0.0001	0.0001
1030	75.	******	******	******	******	******	******	******	******	******
1045	90.	******	0.002	******	0.0041	******	0.0117	0.0013	0.0001	0.0004
1100	105.	******	******	******	******	******	******	******	******	******
1115	120.	0.48	0.003	1.116	0.0068	0.0029	0.0145	0.0021	******	0.0006
1130	135.	******	******	******	******	******	******	******	******	******
1145	150.	******	0.005	******	0.0093	******	0.0206	0.0033	******	0.0007
1200	165.	******	******	******	******	******	******	******	******	******
1215	180.	1.02	0.008	1.425	0.0107	0.0022	0.0169	0.0031	******	0.0007
1230	195.	******	******	******	******	******	******	******	******	******
1245	210.	******	0.009	******	0.0127	******	0.0227	0.0036	******	0.0007
1300	225.	******	******	******	******	******	******	******	******	******
1315	240.	1.47	0.011	1.423	0.0147	0.0041	0.0161	0.0032	******	0.0007
1330	255.	******	******	******	******	******	******	******	******	******
1345	270.	******	0.011	******	0.0161	0.0027	0.0242	0.0037	******	0.0009
1400	285.	******	******	******	******	******	******	******	******	******
1415	300.	1.84	0.012	1.350	0.0150	0.0048	0.0126	0.0027	******	0.0009
1430	315.	******	******	******	******	******	******	******	******	******
1445	330.	******	0.013	******	0.0175	0.0056	0.0208	0.0030	******	0.0009
1500	345.	******	******	******	******	******	******	******	******	******
1515	360.	2.15	0.014	1.227	0.0174	0.0028	0.0111	0.0024	******	0.0009

EC -286
ETHENE
1978 APR 26

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
900	-15.	******	******	******	******	******
915	0.	85.0	40.5	12.68	******	20.00
930	15.	85.5	41.5	******	0.264	******
945	30.	85.2	44.0	******	0.259	******
1000	45.	85.5	46.0	******	******	******
1015	60.	85.7	47.5	12.49	0.254	20.00
1030	75.	86.0	48.0	******	******	******
1045	90.	86.5	48.5	******	******	******
1100	105.	86.5	49.0	******	******	******
1115	120.	86.7	49.0	12.92	0.266	20.00
1130	135.	87.0	49.0	******	******	******
1145	150.	87.0	49.0	******	******	******
1200	165.	87.0	49.0	******	******	******
1215	180.	86.7	49.0	12.40	0.254	20.00
1230	195.	87.0	49.0	******	0.266	******
1245	210.	87.0	49.0	******	******	******
1300	225.	87.0	49.0	******	******	******
1315	240.	87.0	49.0	12.73	0.264	20.00
1330	255.	87.0	49.0	******	0.266	******
1345	270.	87.0	49.0	******	******	******
1400	285.	87.2	49.0	******	******	******
1415	300.	87.2	48.5	12.92	0.271	20.00
1430	315.	87.2	49.0	******	******	******
1445	330.	87.2	49.0	******	******	******
1500	345.	87.2	48.5	******	******	******
1515	360.	87.0	48.5	12.70	0.259	20.00

EC -287
ETHENE
1978 APR 27

BEGIN IRRADIATION 0900; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
BRADY 291, DAISBI 1212 & TECO 14B-1 USED
CO FACTOR: 1.45/15.2; BECKMAN 6800 ON MANUAL OPERATION

T=0 AT 900 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	45.24
SSPOWER	KW	AVERAGE	12.67
RADIUM	MW/CM2	AVERAGE	0.260
H2O	PPM	AVERAGE	1.9C4E 04
NO	PPM	INIT COND	0.404
NO2-CORR	PPM	INIT COND	0.124
ETHENE	PPM	INIT COND	3.995
HCHO	PPM	INIT COND	0.014
ACETALD	PPM	INIT COND	0.001
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.704
430.	1.655
403.	1.526
380.	1.427
370.	1.300
360.	1.128
350.	1.000
340.	0.805
330.	0.561
320.	0.310
310.	0.117
300.	0.017
290.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.711 L/MIN

20 GC SAMPLES TAKEN

EC -287
ETHENE
1978 APR 27

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	ETHENE PPM	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM
840	-14.	******	******	******	******	4.000	0.54	******	******	******	******	******	******	******
900	0.	0.000	0.404	0.124	0.528	3.995	******	0.000	0.014	0.0008	******	0.0010	0.0001	0.0001
915	15.	0.007	0.215	0.301	0.516	3.866	******	******	******	******	******	******	******	******
930	30.	0.073	0.060	0.439	0.498	3.661	******	0.001	******	0.0017	******	0.0034	0.0003	0.0000
945	45.	0.237	0.020	0.449	0.467	3.531	******	******	******	******	******	******	******	******
1000	60.	0.447	0.010	0.405	0.413	3.289	0.66	0.001	0.717	0.0039	******	0.0118	0.0014	******
1015	75.	0.645	0.005	0.345	0.350	3.081	******	******	******	******	******	******	******	******
1030	90.	0.813	0.004	0.282	0.283	2.854	******	0.002	******	0.0063	0.0048	0.0125	0.0022	******
1045	105.	0.911	0.002	0.228	0.228	2.651	******	******	******	******	******	******	******	******
1100	120.	0.955	0.002	0.184	0.184	2.451	1.08	0.004	1.289	0.0084	******	0.0192	0.0030	******
1115	135.	0.965	0.002	0.153	0.153	2.298	******	******	******	******	******	******	******	******
1130	150.	0.948	0.002	0.129	0.130	2.150	******	0.005	******	0.0107	0.0069	0.0211	0.0032	******
1145	165.	0.921	0.002	0.114	0.114	2.043	******	******	******	******	******	******	******	******
1200	180.	0.887	0.002	0.104	0.105	1.922	1.52	0.006	1.426	0.0112	0.0056	0.0121	0.0027	0.0016
1215	195.	0.850	0.002	0.097	0.097	1.841	******	******	******	******	******	******	******	******
1230	210.	0.811	0.002	0.093	0.094	1.756	******	******	******	0.0125	******	0.0116	0.0026	******
1245	225.	0.782	0.002	0.091	0.091	1.645	******	******	******	******	******	******	******	******
1300	240.	0.743	0.002	0.090	0.091	1.567	1.93	0.008	1.182	0.0147	0.0056	0.0175	0.0028	******
1315	255.	0.711	0.001	0.089	0.089	1.513	******	******	******	******	******	******	******	******
1330	270.	0.682	0.002	0.090	0.090	1.446	******	0.009	******	0.0147	0.0046	0.0098	0.0023	******
1345	285.	0.652	0.002	0.090	0.091	1.376	******	******	******	******	******	******	******	******
1400	300.	0.628	0.002	0.090	0.090	1.317	2.29	0.010	1.216	0.0138	0.0045	0.0092	0.0019	******
1415	315.	0.603	0.001	0.090	0.090	1.277	******	******	******	******	******	******	******	******
1430	330.	0.586	0.001	0.092	0.092	1.227	******	0.010	******	0.0103	******	0.0068	0.0020	******
1445	345.	0.567	0.005	0.088	0.092	1.175	******	******	******	******	******	******	******	******
1500	360.	0.552	0.002	0.091	0.092	1.126	2.57	0.011	1.180	0.0180	0.0042	0.0146	0.0023	0.0002

EC -287
ETHENE
1978 APR 27

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM MW/CM2	HCHO VOL L
846	-14.	******	******	******	******	******
900	0.	85.5	40.0	12.57	0.259	20.00
915	15.	85.0	42.0	******	0.264	******
930	30.	85.0	44.0	******	0.259	******
945	45.	85.0	46.0	12.68	0.256	******
1000	60.	86.0	47.0	12.68	0.264	20.00
1015	75.	86.0	47.5	******	******	******
1030	90.	86.5	48.0	******	******	******
1045	105.	86.5	48.0	******	******	******
1100	120.	86.2	48.0	12.56	0.259	20.00
1115	135.	86.2	48.0	******	******	******
1130	150.	86.5	48.5	******	******	******
1145	165.	86.2	48.5	******	******	******
1200	180.	86.5	48.5	12.68	0.261	20.00
1215	195.	86.2	48.5	******	0.256	******
1230	210.	86.5	48.0	******	0.261	******
1245	225.	86.5	48.0	******	0.264	******
1300	240.	86.2	48.0	12.82	0.261	20.00
1315	255.	86.5	48.0	******	0.256	******
1330	270.	86.5	48.0	******	0.259	******
1345	285.	86.2	48.0	******	******	******
1400	300.	86.5	48.0	12.60	0.259	20.00
1415	315.	86.2	48.0	******	******	******
1430	330.	86.5	47.5	******	******	******
1445	345.	86.2	47.5	******	******	******
1500	360.	86.5	47.5	12.75	0.266	20.00

EC -304
N-BUTANE
1978 JUL 25

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
NEGATIVE PEAK (APPROX -1 DIVISIONS) AT T=0 ON PAN CHART AT 1.22 MIN RT
UNKNOWN PEAK ON PAN CHART AT APPROX 2.16 MIN RT
C4-N-2 DATA FROM C-600 CONSIDERED MORE RELIABLE THAN DATA FROM PANALYZER
BRADY 1193X, DASIBI 1212 (550 ML/MIN), TECO 148-1 (570 ML/MIN),
BECKMAN 6800 (125 ML/MIN)
CO FACTOR: 1.45/12.6; BECKMAN 6800 ON MANUAL OPERATION

T=0 AT 930 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	64.87
SSPOWER	KW	AVERAGE	14.65
RADIOM	MW/CM2	AVERAGE	0.263
H2O	PPM	AVERAGE	2.70oE 04
NO	PPM	INIT COND	0.349
NO2-CORR	PPM	INIT COND	0.117
N-C4	PPM	INIT COND	4.277
CO	PPM	INIT COND	1.301
HCHO	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.132
430.	1.873
403.	1.680
380.	1.507
370.	1.318
360.	1.137
350.	1.000
340.	0.803
330.	0.559
320.	0.315
310.	0.126
300.	0.020
290.	0.001
280.	0.0

K1=0.44 MIN-1

SAMPLING RATE = 1.663 L/MIN

36 GC SAMPLES TAKEN

EC -304
N-BUTANE
1978 JUL 25

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM
835	-55.	******	******	******	******	0.0
916	-12.	******	******	******	******	4.29
930	0.	0.000	0.349	0.117	0.466	4.28
945	15.	0.000	0.299	0.159	0.458	******
1000	30.	0.002	0.265	0.202	0.467	4.18
1015	45.	0.007	0.231	0.218	0.449	******
1030	60.	0.007	0.203	0.241	0.443	4.11
1045	75.	0.010	0.176	0.261	0.437	******
1100	90.	0.017	0.155	0.276	0.429	4.03
1115	105.	0.027	0.134	0.289	0.422	******
1130	120.	0.032	0.111	0.306	0.416	3.97
1145	135.	0.044	0.098	0.311	0.408	******
1200	150.	0.051	0.084	0.317	0.399	3.93
1215	165.	0.058	0.073	0.319	0.392	******
1230	180.	0.076	0.061	0.324	0.384	3.87
1245	195.	0.093	0.056	0.319	0.374	******
1300	210.	0.108	0.044	0.321	0.365	3.79
1315	225.	0.125	0.040	0.318	0.355	******
1330	240.	0.144	0.034	0.313	0.346	3.76
1345	255.	0.156	0.032	0.305	0.335	******
1400	270.	0.173	0.027	0.296	0.322	3.69
1415	285.	0.186	0.026	0.291	0.314	******
1430	300.	0.205	0.024	0.278	0.301	3.64
1445	315.	0.217	0.021	0.273	0.291	******
1500	330.	0.237	0.021	0.261	0.280	3.59
1515	345.	0.254	0.020	0.250	0.268	******
1530	360.	0.269	0.020	0.234	0.253	3.53
1545	375.	0.288	0.016	0.228	0.243	******
1600	390.	0.305	0.015	0.220	0.232	******
1615	405.	0.322	0.013	0.210	0.221	******
1630	420.	0.342	0.029	0.185	0.212	******
1645	435.	0.362	0.011	0.192	0.201	******

EC -304
N-BUTANE
1976 JUL 25

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM PANALYZR	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR	C4-N-1 PPM PANALYZR
835	-55.	******	******	******	0.001	0.0001	0.0005	0.0001	0.0001	******	0.0	******	******
918	-12.	******	******	******	******	******	******	******	******	******	******	******	******
930	0.	1.30	0.000	0.002	******	******	0.0004	******	0.0001	0.0	0.0	0.0	0.0
945	15.	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.000	******	******	******	0.0022	0.0018	0.0180	0.0	0.0042	0.0027	0.0
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	1.40	0.001	0.004	0.030	******	0.0005	0.0009	0.0212	0.0001	0.0069	0.0042	0.0005
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.002	******	0.045	0.0003	0.0012	******	0.0332	0.0002	0.0097	0.0059	0.0004
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	1.50	0.004	0.006	0.068	0.0008	0.0035	0.0022	0.0587	0.0002	0.0119	0.0075	0.0004
1145	135.	******	******	******	******	******	******	******	******	******	******	******	******
1200	150.	******	0.006	******	0.074	0.0006	0.0016	0.0021	0.0453	0.0003	0.0143	0.0093	0.0007
1215	165.	******	******	******	******	******	******	******	******	******	******	******	******
1230	180.	1.61	0.008	0.009	0.085	0.0010	0.0019	0.0036	0.0518	0.0003	0.0167	0.0106	0.0010
1245	195.	******	******	******	******	******	******	******	******	******	******	******	******
1300	210.	******	0.011	0.020	0.091	0.0007	0.0016	******	0.0551	0.0003	0.0188	0.0118	0.0011
1315	225.	******	******	******	******	******	******	******	******	******	******	******	******
1330	240.	1.67	0.014	0.031	0.108	0.0010	0.0010	0.0043	0.0634	0.0003	0.0211	0.0129	0.0011
1345	255.	******	******	******	******	******	******	******	******	******	******	******	******
1400	270.	******	0.017	******	0.112	0.0012	0.0027	******	0.0695	0.0004	0.0227	0.0142	0.0018
1415	285.	******	******	******	******	******	******	******	******	******	******	******	******
1430	300.	1.77	0.020	0.025	0.117	0.0013	0.0034	******	0.0790	0.0004	0.0242	0.0158	0.0017
1445	315.	******	******	******	******	******	******	******	******	******	******	******	******
1500	330.	******	0.023	******	0.143	0.0022	0.0048	0.0055	0.0919	0.0004	0.0263	0.0162	0.0018
1515	345.	******	******	******	******	******	******	******	******	******	******	******	******
1530	360.	1.92	0.027	0.0	0.149	0.0021	0.0048	0.0050	0.0921	0.0004	0.0291	0.0171	0.0018
1545	375.	******	******	******	******	******	******	******	******	******	******	******	******
1600	390.	******	******	******	******	******	******	******	******	******	******	******	******
1615	405.	******	******	******	******	******	******	******	******	******	******	******	******
1630	420.	******	******	******	******	******	******	******	******	******	******	******	******
1645	435.	******	******	******	******	******	******	******	******	******	******	******	******

EC -304
N-BUTANE
1976 JUL 25

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
835	-55.	******	******	******	******	******
918	-12.	******	******	******	******	******
930	0.	83.8	51.5	14.47	******	38.00
945	15.	84.5	54.0	******	0.259	******
1000	30.	84.0	58.5	******	0.254	******
1015	45.	84.3	61.5	******	******	******
1030	60.	84.8	63.5	14.43	0.259	20.00
1045	75.	85.0	64.0	******	******	******
1100	90.	85.2	64.5	******	******	******
1115	105.	86.0	64.5	******	******	******
1130	120.	86.0	64.5	14.31	******	20.00
1145	135.	87.0	64.5	******	0.269	******
1200	150.	87.0	64.5	******	******	******
1215	165.	87.4	64.5	******	******	******
1230	180.	86.7	64.5	14.54	0.256	20.00
1245	195.	87.2	64.5	******	******	******
1300	210.	87.4	64.5	******	******	******
1315	225.	87.2	64.5	******	******	******
1330	240.	87.4	64.5	14.82	0.271	20.00
1345	255.	86.5	65.0	******	******	******
1400	270.	86.0	66.5	******	******	******
1415	285.	85.7	67.5	******	******	******
1430	300.	85.5	68.0	14.80	0.266	20.00
1445	315.	85.5	68.5	******	0.269	******
1500	330.	85.7	68.5	******	0.269	******
1515	345.	85.5	68.0	******	0.269	******
1530	360.	85.5	68.0	15.19	0.266	20.00
1545	375.	85.2	68.0	******	0.264	******
1600	390.	85.5	68.0	******	0.261	******
1615	405.	85.5	68.0	******	0.266	******
1630	420.	85.5	68.0	******	0.264	******
1645	435.	85.7	68.0	******	0.269	******

EC -305
N-BUTANE
1978 JUL 26

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
NEGATIVE PEAK (APPROX.-1 DIVISIONS) AT T=0 ON PAN CHART AT ROUGHLY 1.22 MIN RT
C4-N-2 DATA FROM C-600 CONSIDERED MORE RELIABLE THAN DATA FROM PANALYZER
BRADY 1193A,DASIBI 1212 (550 ML/MIN), TECO 146-1 (570 ML/MIN),
BECKMAN 6800 (125 ML/MIN)
CO FACTOR= 1.45/12.6; BECKMAN 6600 ON MANUAL OPERATION

T=0 AT 930 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	65.30
SSPOWER	KW	AVERAGE	14.76
RADIOM	MW/CM2	AVERAGE	0.261
H2O	PPM	AVERAGE	2.735E 04
NO	PPM	INIT COND	0.076
NO2-CORR	PPM	INIT COND	0.020
N-C4	PPM	INIT COND	4.296
CO	PPM	INIT COND	1.232
HCHO	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.919
430.	1.751
403.	1.605
380.	1.433
370.	1.315
360.	1.126
350.	1.000
340.	0.798
330.	0.556
320.	0.314
310.	0.125
300.	0.020
290.	0.001
280.	0.0

K1=0.43 MIN-1

SAMPLING RATE = 1.598 L/MIN

29 GC SAMPLES TAKEN

EC -305
N-BUTANE
1978 JUL 26

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM RM 121	N-C4 PPM RM 103
830	-60.	******	******	******	******	0.0	******
918	-12.	******	******	******	******	4.32	******
930	0.	0.000	0.078	0.020	0.099	4.30	******
945	15.	0.020	0.040	0.055	0.095	******	******
1000	30.	0.042	0.025	0.069	0.095	******	3.93
1015	45.	0.071	0.019	0.076	0.095	******	******
1030	60.	0.098	0.017	0.073	0.089	4.13	******
1045	75.	0.130	0.014	0.072	0.086	******	******
1100	90.	0.159	0.014	0.077	0.091	******	3.91
1115	105.	0.178	0.012	0.072	0.084	******	******
1130	120.	0.205	0.011	0.066	0.076	3.94	******
1145	135.	0.227	0.010	0.063	0.073	******	******
1200	150.	0.237	0.009	0.060	0.069	******	3.82
1215	165.	0.271	0.009	0.057	0.066	******	******
1230	180.	0.281	0.009	0.053	0.062	3.85	******
1245	195.	0.310	0.008	0.049	0.057	******	******
1300	210.	0.325	0.010	0.043	0.052	******	******
1315	225.	0.340	0.008	0.040	0.048	******	******
1330	240.	0.352	0.007	0.038	0.044	3.72	3.67
1345	255.	0.362	0.008	0.035	0.043	******	******
1400	270.	0.371	0.008	0.033	0.040	******	3.57
1415	285.	0.379	0.007	0.032	0.039	******	******
1430	300.	0.386	0.009	0.030	0.038	3.64	******
1445	315.	0.388	0.007	0.029	0.036	******	******
1500	330.	0.393	0.007	0.026	0.033	******	******
1515	345.	0.398	0.007	0.026	0.033	******	******
1530	360.	0.398	0.007	0.024	0.030	3.53	******

EC -305
N-BUTANE
1978 JUL 26

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM PANALYZR	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR	C4-N-1 PPM PANALYZR
830	-60.	******	******	******	0.001	0.0001	0.0005	0.0000	0.0001	******	0.0	******	******
918	-12.	1.22	******	******	******	******	******	******	******	******	******	******	******
930	0.	1.23	0.000	0.002	******	0.0001	0.0005	0.0001	0.0002	0.0	0.0	0.0	0.0
945	15.	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.001	******	******	******	******	******	******	0.0	******	0.0026	0.0
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	1.27	0.002	0.001	0.030	0.0004	0.0017	******	0.0202	0.0001	0.0071	0.0047	0.0004
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.005	******	******	******	******	******	******	0.0001	******	0.0065	0.0004
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	1.37	0.007	0.008	0.061	0.0012	0.0025	******	0.0372	0.0002	0.0120	0.0078	0.0007
1145	135.	******	******	******	******	******	******	******	******	******	******	******	******
1200	150.	******	0.010	******	******	******	******	******	******	0.0002	******	0.0088	0.0007
1215	165.	******	******	******	******	******	******	******	******	******	******	******	******
1230	180.	1.46	0.013	0.012	0.083	0.0012	0.0101	******	0.0587	0.0003	0.0160	0.0103	0.0010
1245	195.	******	******	******	******	******	******	******	******	******	******	******	******
1300	210.	******	0.018	******	******	******	******	******	******	0.0003	******	0.0115	0.0010
1315	225.	******	******	******	******	******	******	******	******	******	******	******	******
1330	240.	1.54	0.021	0.017	0.097	0.0019	0.0071	0.0025	0.0024	0.0003	0.0196	0.0123	0.0011
1345	255.	******	******	******	******	******	******	******	******	******	******	******	******
1400	270.	******	0.023	******	******	******	******	******	******	0.0003	******	0.0130	0.0011
1415	285.	******	******	******	******	******	******	******	******	******	******	******	******
1430	300.	1.60	0.025	0.016	0.122	0.0025	0.0085	0.0050	0.0750	0.0003	0.0224	0.0138	0.0011
1445	315.	******	******	******	******	******	******	******	******	******	******	******	******
1500	330.	******	0.029	******	******	******	******	******	******	0.0003	******	0.0146	0.0011
1515	345.	******	******	******	******	******	******	******	******	******	******	******	******
1530	360.	1.73	0.031	0.023	0.131	0.0030	0.0062	0.0057	0.0847	0.0003	0.0237	0.0150	0.0016

EC -305
N-BUTANE
1978 JUL 26

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADION MW/CM2	HCHO VOL L
830	-60.	******	******	******	******	******
918	-12.	******	******	******	******	******
930	0.	85.5	51.5	14.62	******	20.00
945	15.	85.7	54.5	******	******	******
1000	30.	85.0	60.0	******	******	******
1015	45.	85.0	64.5	******	******	******
1030	60.	85.2	67.0	14.82	0.266	20.00
1045	75.	86.2	68.0	******	******	******
1100	90.	86.5	68.5	******	******	******
1115	105.	87.0	68.5	******	******	******
1130	120.	87.0	68.5	14.74	0.266	20.00
1145	135.	87.4	68.5	******	******	******
1200	150.	86.7	69.0	******	******	******
1215	165.	86.7	69.0	******	******	******
1230	180.	86.2	69.0	14.74	******	20.00
1245	195.	86.5	69.0	******	******	******
1300	210.	86.0	69.5	******	******	******
1315	225.	86.0	69.5	******	******	******
1330	240.	86.0	69.5	14.93	0.266	20.00
1345	255.	86.5	69.5	******	******	******
1400	270.	85.7	69.5	******	******	******
1415	285.	86.0	69.5	******	******	******
1430	300.	85.5	69.5	14.43	0.256	20.00
1445	315.	86.0	69.5	******	0.259	******
1500	330.	86.2	69.5	******	0.264	******
1515	345.	86.2	69.5	******	******	******
1530	360.	85.7	69.5	15.20	0.271	20.00

EC -306
N-BUTANE 85 DEG F
1973 JUL 27

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
NEGATIVE PEAK (APPROX -1.0 DIV) AT T=0 ON PAN CHART AT 1.25 MIN RT
UNKNOWN PEAK AT RT 2.19 ON PAN CHART; MAX PEAK HEIGHT: 1.2
C4-N-2 DATA FROM C-600 CONSIDERED MORE RELIABLE THAN DATA FROM PANALYZER
BRADY 1193X,DASIBI 1212 (550 ML/MIN), TECO 148-1 (570 ML/MIN),
BECKMAN 6800 (125 ML/MIN)
CO FACTOR: 1.45/12.6; BECKMAN 6800 ON MANUAL OPERATION

T=0 AT 1000 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	59.37
SSPOWER	KW	AVERAGE	14.62
RADIUM	MW/CM2	AVERAGE	0.260
H2O	PPM	AVERAGE	2.488E 04
NO	PPM	INIT COND	0.147
NO2-CORR	PPM	INIT COND	0.040
N-C4	PPM	INIT COND	6.435
CO	PPM	INIT COND	2.392
HCHO	PPM	INIT COND	0.007

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.840
430.	1.675
403.	1.534
380.	1.405
370.	1.279
360.	1.126
350.	1.000
340.	0.799
330.	0.562
320.	0.314
310.	0.122
300.	0.019
290.	0.0

K1=0.44 MIN-1

SAMPLING RATE = 1.563 L/MIN

36 GC SAMPLES TAKEN

EC -306
N-BUTANE 85 DEG F
1978 JUL 27

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOx-CORR PPM	N-C4 PPM
900	-60.	******	******	******	******	0.0
945	-15.	******	******	******	******	6.42
1000	0.	0.000	0.147	0.040	0.187	6.44
1015	15.	0.007	0.100	0.083	0.183	******
1030	30.	0.020	0.069	0.111	0.181	6.25
1045	45.	0.037	0.051	0.127	0.177	******
1100	60.	0.059	0.038	0.138	0.175	6.17
1115	75.	0.081	0.034	0.139	0.174	******
1130	90.	0.103	0.023	0.146	0.168	6.08
1145	105.	0.139	0.019	0.146	0.163	******
1200	120.	0.166	0.017	0.142	0.153	6.02
1215	135.	0.193	0.015	0.139	0.153	******
1230	150.	0.220	0.013	0.135	0.147	5.93
1245	165.	0.244	0.011	0.130	0.141	******
1300	180.	0.281	0.009	0.121	0.134	5.85
1315	195.	0.300	0.010	0.118	0.127	******
1330	210.	0.327	0.009	0.110	0.118	5.74
1345	225.	0.352	0.008	0.105	0.112	******
1400	240.	0.379	0.007	0.097	0.104	5.71
1415	255.	0.403	0.007	0.090	0.097	******
1430	270.	0.423	0.008	0.084	0.091	5.60
1445	285.	0.445	0.007	0.076	0.083	******
1500	300.	0.464	0.007	0.068	0.075	5.56
1515	315.	0.481	0.006	0.063	0.068	******
1530	330.	0.498	0.006	0.058	0.063	5.46
1545	345.	0.508	0.006	0.051	0.056	******
1600	360.	0.520	0.006	0.046	0.051	5.40
1615	375.	0.528	0.005	0.045	0.050	******
1630	390.	0.535	0.013	0.041	0.053	******
1645	405.	0.535	0.005	0.042	0.047	******

EC -306
N-BUTANE 85 DEG F
1978 JUL 27

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM PANALYZR	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR	C4-N-1 PPM PANALYZR
900	-60.	******	******	******	0.001	0.0001	0.0003	0.0000	0.0002	******	0.0	******	******
945	-15.	******	******	******	******	******	******	******	******	******	******	******	******
1000	0.	2.39	0.000	0.007	******	0.0001	0.0001	0.0000	0.0001	0.0	0.0	0.0	0.0
1015	15.	******	******	******	******	******	******	******	******	******	******	******	******
1030	30.	******	0.001	******	0.015	******	0.0004	0.0009	0.0119	0.0	0.0043	0.0027	0.0
1045	45.	******	******	******	******	******	******	******	******	******	******	******	******
1100	60.	2.45	0.002	0.003	0.032	0.0001	0.0008	0.0012	0.0214	0.0001	0.0071	0.0045	0.0003
1115	75.	******	******	******	******	******	******	******	******	******	******	******	******
1130	90.	******	0.003	******	0.055	******	0.0038	0.0020	0.0440	0.0002	0.0097	0.0065	0.0004
1145	105.	******	******	******	******	******	******	******	******	******	******	******	******
1200	120.	2.52	0.005	0.004	0.071	0.0008	0.0025	0.0023	0.0398	0.0002	0.0124	0.0080	******
1215	135.	******	******	******	******	******	******	******	******	******	******	******	******
1230	150.	******	0.007	******	0.080	0.0007	0.0027	0.0023	0.0466	0.0003	0.0154	0.0093	0.0005
1245	165.	******	******	******	******	******	******	******	******	******	******	******	******
1300	180.	2.60	0.011	0.013	0.085	0.0010	0.0034	******	0.0545	0.0003	0.0171	0.0110	0.0011
1315	195.	******	******	******	******	******	******	******	******	******	******	******	******
1330	210.	******	0.015	******	0.107	0.0014	0.0036	0.0038	0.0571	0.0003	0.0204	0.0124	0.0011
1345	225.	******	******	******	******	******	******	******	******	******	******	******	******
1400	240.	******	0.019	0.009	0.117	******	0.0039	******	0.0658	0.0003	0.0217	0.0146	0.0013
1415	255.	******	******	******	******	******	******	******	******	******	******	******	******
1430	270.	******	0.019	******	0.139	0.0021	0.0047	0.0051	0.0746	0.0004	0.0243	0.0153	0.0015
1445	285.	******	******	******	******	******	******	******	******	******	******	******	******
1500	300.	******	0.026	0.001	0.138	0.0035	0.0040	******	0.0832	0.0004	0.0260	0.0173	0.0018
1515	315.	******	******	******	******	******	******	******	******	******	******	******	******
1530	330.	******	0.029	******	0.166	0.0031	0.0061	0.0149	0.0962	0.0004	0.0268	0.0173	0.0018
1545	345.	******	******	******	******	******	******	******	******	******	******	******	******
1600	360.	2.90	0.035	0.002	0.153	0.0022	0.0055	******	0.0980	0.0004	0.0269	0.0191	0.0020
1615	375.	******	******	******	******	******	******	******	******	******	******	******	******
1630	390.	******	******	******	******	******	******	******	******	******	******	******	******
1645	405.	******	******	******	******	******	******	******	******	******	******	******	******

EC -306
N-BUTANE 85 DEG F
1978 JUL 27

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
900	-60.	******	******	******	******	******
945	-15.	******	******	******	******	******
1000	0.	85.0	49.0	14.62	0.259	20.00
1015	15.	84.5	51.5	******	0.266	******
1030	30.	84.0	55.5	14.82	0.261	******
1045	45.	85.0	57.5	******	0.259	******
1100	60.	86.2	59.0	14.43	0.254	20.00
1115	75.	85.5	59.5	******	******	******
1130	90.	86.5	60.0	******	******	******
1145	105.	86.0	60.0	******	******	******
1200	120.	86.5	60.0	14.62	0.266	20.00
1215	135.	86.2	60.0	******	******	******
1230	150.	87.2	60.0	******	0.256	******
1245	165.	87.2	60.0	******	0.264	******
1300	180.	87.2	60.0	14.80	0.261	20.00
1315	195.	86.7	59.5	******	******	******
1330	210.	87.2	59.5	******	******	******
1345	225.	87.0	59.5	******	******	******
1400	240.	87.2	59.5	14.62	0.259	20.00
1415	255.	87.2	59.5	******	******	******
1430	270.	87.2	59.5	******	******	******
1445	285.	87.4	59.5	******	******	******
1500	300.	87.2	59.0	14.62	0.259	20.00
1515	315.	86.2	59.5	******	******	******
1530	330.	86.0	61.0	******	******	******
1545	345.	85.7	62.0	******	******	******
1600	360.	85.5	62.5	14.43	******	20.00
1615	375.	85.2	62.5	******	0.261	******
1630	390.	85.2	62.5	******	0.252	******
1645	405.	85.5	63.0	******	0.256	******

EC -307
N-BUTANE
1978 JUL 28

BEGIN IRRADIATION: 0930 0.25 INCH PYREX FILTER: TRICHROIC FILTER OUT
NEGATIVE PEAK (APPROX -1.0 DIV) AT T=0 ON PAN CHART AT 1.25 MIN RT
UNKNOWN PEAK AT RT 2.19 ON PAN CHART; MAXPEAK HEIGHT: 1.2
C4-N-2 DATA FROM C-600 CONSIDERED MORE RELIABLE THAN DATA FROM PANALYZER
BRADY 1193X,DASIBI 1212 (550 ML/MIN), TECO 148-1 (570 ML/MIN),
BECKMAN 6800 (125 ML/MIN)
CO FACTOR: 1.45/12.6 BECKMAN 6800 ON MANUAL OPERATION

T=0 AT 930 PDT

	CALIB#
HCHO	3
PAN	9
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	69.37
SSPOWER	KW	AVERAGE	14.79
RADIOM	MW/CM2	AVERAGE	0.261
H2O	PPM	AVERAGE	4.C79E 04
OZONE	PPM	INIT COND	0.002
NO	PPM	INIT COND	0.083
NO2-CORR	PPM	INIT COND	0.019
N-C4	PPM	INIT COND	6.435
CO	PPM	INIT COND	2.739
HCHO	PPM	INIT COND	0.052

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.904
430.	1.737
403.	1.600
390.	1.460
370.	1.305
360.	1.129
350.	1.000
340.	0.801
330.	0.555
320.	0.312
310.	0.124
300.	0.021
290.	0.0

K1=0.44 MIN-1

SAMPLING RATE = 1.577 L/MIN

37 GC SAMPLES TAKEN

EC -307
N-BUTANE
1978 JUL 28

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM
825	-65.	******	******	******	******	0.0
920	-10.	0.0	0.082	0.019	0.101	6.51
930	0.	0.002	0.083	0.019	0.102	6.44
945	15.	0.020	0.047	0.052	0.099	******
1000	30.	0.044	0.028	0.069	0.097	6.29
1015	45.	0.081	0.020	0.076	0.098	******
1030	60.	0.107	0.016	0.078	0.094	6.18
1045	75.	0.139	0.014	0.077	0.090	******
1100	90.	0.169	0.012	0.076	0.087	6.11
1115	105.	0.198	0.024	0.060	0.084	******
1130	120.	0.222	0.011	0.069	0.080	5.98
1145	135.	0.249	0.010	0.066	0.075	******
1200	150.	0.271	0.010	0.062	0.072	5.88
1215	165.	0.291	0.009	0.058	0.066	******
1230	180.	0.313	0.008	0.055	0.064	5.83
1245	195.	0.332	0.015	0.046	0.060	******
1300	210.	0.347	0.008	0.048	0.055	5.76
1315	225.	0.364	0.008	0.044	0.052	******
1330	240.	0.376	0.008	0.043	0.051	5.66
1345	255.	0.386	0.008	0.036	0.044	******
1400	270.	0.396	0.007	0.034	0.041	5.58
1415	285.	0.403	0.008	0.042	0.050	******
1430	300.	0.410	0.007	0.032	0.039	5.61
1445	315.	0.413	0.006	0.031	0.037	******
1500	330.	0.415	0.005	0.030	0.035	5.44
1515	345.	0.420	0.007	0.029	0.036	******
1530	360.	0.420	0.007	0.029	0.035	5.39
1545	375.	0.420	0.007	0.028	0.034	******
1600	390.	0.420	******	******	******	******

EC -307
N-BUTANE
1978 JUL 28

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM PANALYZR	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR	C4-N-1 PPM PANALYZR
825	-65.	******	******	******	0.002	0.0001	0.0004	0.0000	0.0001	******	0.0	******	******
920	-10.	******	******	******	******	******	******	******	******	******	******	******	******
930	0.	2.74	0.000	0.052	******	******	0.0003	0.0000	0.0001	0.0	0.0	0.0	0.0
945	15.	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.001	******	0.022	0.0002	0.0023	0.0009	0.0181	0.0000	0.0044	0.0027	0.0
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	2.79	0.002	0.013	0.041	0.0003	0.0025	0.0016	0.0217	0.0001	0.0073	0.0050	0.0
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.004	******	0.062	0.0007	0.0072	0.0026	0.0463	0.0002	0.0100	0.0062	0.0003
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	2.89	0.007	0.010	0.080	******	******	0.0028	0.0571	0.0002	0.0128	0.0082	0.0005
1145	135.	******	******	******	******	******	******	******	******	******	******	******	******
1200	150.	******	0.009	******	0.089	0.0012	0.0058	0.0042	0.0497	0.0002	0.0150	0.0096	0.0008
1215	165.	******	******	******	******	******	******	******	******	******	******	******	******
1230	180.	2.95	0.011	0.019	0.107	0.0012	0.0112	0.0037	0.0752	0.0003	0.0170	0.0111	0.0006
1245	195.	******	******	******	******	******	******	******	******	******	******	******	******
1300	210.	******	0.014	******	0.097	******	******	******	0.0577	0.0003	0.0191	0.0124	0.0009
1315	225.	******	******	******	******	******	******	******	******	******	******	******	******
1330	240.	3.08	0.017	0.086	0.104	0.0010	0.0113	******	0.0715	0.0003	0.0199	0.0133	0.0014
1345	255.	******	******	******	******	******	******	******	******	******	******	******	******
1400	270.	******	0.020	******	0.147	0.0024	0.0174	0.0067	0.1093	0.0004	0.0223	0.0144	0.0015
1415	285.	******	******	******	******	******	******	******	******	******	******	******	******
1430	300.	3.12	0.020	0.021	0.150	0.0027	0.0210	0.0072	******	0.0003	0.0234	0.0146	0.0017
1445	315.	******	******	******	******	******	******	******	******	******	******	******	******
1500	330.	******	0.024	******	0.142	0.0020	0.0137	******	0.0887	0.0004	0.0234	0.0156	0.0015
1515	345.	******	******	******	******	******	******	******	******	******	******	******	******
1530	360.	3.15	0.023	0.029	0.161	0.0016	******	0.0061	0.1391	0.0003	0.0249	0.0154	0.0014
1545	375.	******	******	******	******	******	******	******	******	******	******	******	******
1600	390.	******	0.026	******	******	******	******	******	******	0.0004	******	0.0157	0.0016

EC -307
N-BUTANE
1978 JUL 28

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
825	-65.	******	******	******	******	******
920	-10.	******	******	******	******	******
930	0.	85.2	53.5	******	0.254	20.00
945	15.	85.5	57.5	******	0.266	******
1000	30.	85.0	63.5	14.82	0.264	******
1015	45.	85.0	68.5	******	******	******
1030	60.	85.0	69.5	14.59	0.256	20.00
1045	75.	86.2	70.0	******	0.252	******
1100	90.	85.2	70.0	******	******	******
1115	105.	86.5	70.0	******	******	******
1130	120.	87.0	70.0	14.70	0.259	20.00
1145	135.	86.2	70.0	******	******	******
1200	150.	86.0	70.5	******	******	******
1215	165.	86.0	70.5	******	******	******
1230	180.	85.7	71.0	14.43	0.254	20.00
1245	195.	86.0	71.0	******	0.264	******
1300	210.	85.5	71.0	******	******	******
1315	225.	85.5	71.0	******	******	******
1330	240.	85.2	71.0	14.73	0.259	20.00
1345	255.	85.7	71.0	******	******	******
1400	270.	85.7	71.0	******	******	******
1415	285.	85.5	71.0	******	******	******
1430	300.	85.7	71.0	15.16	0.266	20.00
1445	315.	85.5	71.0	******	0.264	******
1500	330.	85.5	71.0	******	0.264	******
1515	345.	85.5	71.0	******	******	******
1530	360.	85.5	71.0	15.12	0.264	20.00
1545	375.	85.5	71.0	******	******	******
1600	390.	85.5	71.0	******	0.261	******

EC -308
N-BUTANE 60 DEG F
1978 JUL 31

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
BAD 2-C4NO2 BASELINE ON C-600 CHART; C-600 O2 UP SLIGHTLY
NEGATIVE PEAK (APPROX -1 DIVISIONS) AT T=0 ON PAN CHART AT 1.13 MIN RT
C4-N-2 DATA FROM C-600 CONSIDERED MORE RELIABLE THAN DATA FROM PANALYZER
BRADY 1193A,DASIBI 1212 (550 ML/MIN), TECO 148-1 (570 ML/MIN),
CO FACTOR:1.45/12.2

T=0 AT 945 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	288.9
REL HUM	%	AVERAGE	50.69
SSPOWER	KW	AVERAGE	15.11
RADION	MW/CM2	AVERAGE	0.262
H2O	PPM	AVERAGE	8.901E 03
NO	PPM	INIT COND	0.305
NO2-CORR	PPM	INIT COND	0.178
N-C4	PPM	INIT COND	4.054
CO	PPM	INIT COND	1.190

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.919
430.	1.738
403.	1.595
380.	1.464
370.	1.317
360.	1.140
350.	1.000
340.	0.784
330.	0.558
320.	0.316
310.	0.126
300.	0.020
290.	0.0

K1=0.45 MIN-1

SAMPLING RATE = 1.603 L/MIN

36 GC SAMPLES TAKEN

FC -308
N-BUTANE 60 DEG F
1978 JUL 31

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	N-C4 PPM
840	-65.	******	******	******	******	0.0
930	-15.	******	******	******	******	4.06
945	0.	0.000	0.305	0.178	0.483	4.05
1000	15.	0.002	0.281	0.190	0.471	******
1015	30.	0.005	0.267	0.197	0.464	3.96
1030	45.	0.007	0.244	0.216	0.459	******
1045	60.	0.007	0.231	0.222	0.453	3.91
1100	75.	0.010	0.220	0.229	0.448	******
1115	90.	0.010	0.211	0.233	0.442	3.87
1130	105.	0.010	0.203	0.239	0.440	******
1145	120.	0.012	0.193	0.243	0.434	3.81
1200	135.	0.015	0.183	0.248	0.431	******
1215	150.	0.017	0.176	0.253	0.426	3.77
1230	165.	0.017	0.170	0.253	0.421	******
1245	180.	0.020	0.162	0.256	0.418	3.74
1300	195.	0.020	0.154	0.261	0.414	******
1315	210.	0.022	0.149	0.262	0.409	3.69
1330	225.	0.022	0.144	0.263	0.405	******
1345	240.	0.027	0.133	0.270	0.402	3.65
1400	255.	0.027	0.129	0.269	0.398	******
1415	270.	0.029	0.122	0.270	0.392	3.61
1430	285.	0.032	0.121	0.273	0.390	******
1445	300.	0.034	0.112	0.274	0.383	3.58
1500	315.	0.037	0.109	0.271	0.378	******
1515	330.	0.039	0.103	0.274	0.375	3.53
1530	345.	0.044	0.098	0.275	0.371	******
1545	360.	0.044	0.095	0.272	0.366	3.47

EC -308
N-BUTANE 60 DEG F
1978 JUL 31

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM PANALYZR	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR	C4-N-1 PPM PANALYZR
840	-65.	******	******	******	0.003	0.0004	0.0008	0.0001	0.0001	******	0.0	******	******
930	-15.	1.18	******	******	******	******	******	******	******	******	******	******	******
945	0.	1.19	0.000	0.0	******	******	0.0004	******	0.0002	0.0	0.0	0.0	0.0
1000	15.	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	******	0.001	******	0.006	******	0.0011	0.0010	0.0193	0.0	0.0043	0.0023	0.0
1030	45.	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	1.24	0.001	0.0	0.012	0.0002	0.0016	0.0015	0.0292	0.0	0.0054	0.0029	0.0
1100	75.	******	******	******	******	******	******	******	******	******	******	******	******
1115	90.	******	0.001	******	0.013	******	0.0011	0.0016	0.0305	0.0	0.0056	0.0036	0.0003
1130	105.	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	1.62	0.001	0.0	0.015	0.0002	0.0006	******	0.0282	0.0000	0.0069	0.0044	0.0004
1200	135.	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	******	0.002	******	0.020	0.0001	0.0018	0.0007	0.0464	0.0001	0.0080	0.0053	0.0003
1230	165.	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	1.68	0.002	0.000	0.024	0.0003	0.0031	0.0017	0.0589	0.0001	0.0096	0.0059	0.0006
1300	195.	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	******	0.002	******	0.025	******	0.0041	******	0.0554	0.0001	0.0097	0.0067	0.0005
1330	225.	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	1.75	0.003	0.004	******	0.0005	0.0046	0.0032	0.0760	0.0001	0.0109	0.0075	0.0005
1400	255.	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	******	0.004	******	0.028	0.0004	0.0014	******	0.0494	0.0001	0.0116	0.0079	0.0005
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	1.80	0.004	0.005	0.034	******	0.0039	******	0.0763	0.0001	0.0126	0.0085	0.0009
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	******	0.005	******	0.027	0.0008	0.0014	******	0.0551	0.0002	0.0132	0.0092	0.0007
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	1.81	0.004	0.010	0.037	0.0005	0.0015	******	0.0585	0.0001	0.0139	0.0095	0.0008

EC -308
N-BUTANE 60 DEG F
1978 JUL 31

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADIOM MW/CM2	HCHO VOL L
840	-65.	******	******	******	******	******
930	-15.	******	******	******	******	******
945	0.	59.1	42.0	15.40	0.254	20.00
1000	15.	60.1	44.5	******	0.274	******
1015	30.	59.6	48.0	******	0.256	******
1030	45.	59.8	50.5	******	0.261	******
1045	60.	60.3	51.5	15.29	0.266	20.00
1100	75.	60.3	52.0	******	******	******
1115	90.	60.6	52.0	******	******	******
1130	105.	60.3	52.0	******	******	******
1145	120.	60.3	52.0	15.20	0.264	20.00
1200	135.	60.1	52.0	******	******	******
1215	150.	60.1	52.0	******	******	******
1230	165.	60.3	51.5	******	******	******
1245	180.	60.1	51.5	14.96	0.259	20.00
1300	195.	60.1	51.5	******	******	******
1315	210.	60.3	51.5	******	******	******
1330	225.	60.3	51.5	******	******	******
1345	240.	60.1	51.0	14.69	0.249	20.00
1400	255.	60.3	51.0	******	******	******
1415	270.	60.3	51.0	******	******	******
1430	285.	60.6	51.0	******	******	******
1445	300.	60.6	51.0	15.01	0.266	20.00
1500	315.	60.6	51.0	******	******	******
1515	330.	60.6	51.0	******	******	******
1530	345.	60.6	51.0	******	******	******
1545	360.	60.6	50.5	15.24	0.269	20.00

EC -309
N-BUTANE 100 DEG F
1978 AUG 1

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
UNKNOWN PEAK ON PAN CHART AT RT 2.24; MAX HEIGHT APPROX 1.2
C4-N-2 DATA FROM C-600 CONSIDERED MORE RELIABLE THAN DATA FROM PANALYZER
BRADY 1193X, DASIBI 1212 (550 ML/MIN), TECO 14-1B (570 ML/MIN),
BECKMAN 6600 (125 ML/MIN)
CO FACTOR: 1.45/12.1; BECKMAN 6800 ON MANUAL OPERATION

T=0 AT 1000 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	311.5
REL HUM	%	AVERAGE	34.77
SSPOWER	KW	AVERAGE	15.33
RADICM	MW/CM2	AVERAGE	0.261
H2O	PPM	AVERAGE	2.309E 04
NO	PPM	INIT COND	0.203
NO2-COR*	PPM	INIT COND	0.272
N-C4	PPM	INIT COND	4.306
CO	PPM	INIT COND	0.864
HCHO	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.917
430.	1.760
403.	1.598
380.	1.456
370.	1.319
360.	1.126
350.	1.000
340.	0.800
330.	0.557
320.	0.313
310.	0.124
300.	0.019
290.	0.0

K1=0.45 MIN-1

SAMPLING RATE = 1.563 L/MIN

36 GC SAMPLES TAKEN

EC -309
N-BUTANE 100 DEG F
1978 AUG 1

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOx-CORR PPM	N-C4 PPM
830	-90.	******	******	******	******	0.0
930	-30.	******	******	******	******	4.36
1000	0.	0.000	0.203	0.272	0.475	4.31
1015	15.	0.020	0.149	0.309	0.458	******
1030	30.	0.027	0.121	0.329	0.449	4.18
1045	45.	0.032	0.100	0.340	0.439	******
1100	60.	0.049	0.084	0.353	0.436	4.10
1115	75.	0.059	0.072	0.357	0.427	******
1130	90.	0.071	0.060	0.363	0.421	4.03
1145	105.	0.088	0.053	0.362	0.413	******
1200	120.	0.105	0.045	0.361	0.405	3.98
1215	135.	0.125	0.040	0.360	0.399	******
1230	150.	0.147	0.035	0.356	0.390	3.98
1245	165.	0.166	0.031	0.354	0.383	******
1300	180.	0.183	0.027	0.352	0.378	3.86
1315	195.	0.210	0.022	0.346	0.368	******
1330	210.	0.230	0.020	0.342	0.360	3.78
1345	225.	0.257	0.018	0.347	0.364	******
1400	240.	0.283	0.016	0.333	0.348	3.73
1415	255.	0.313	0.015	0.327	0.340	******
1430	270.	0.340	0.016	0.320	0.333	3.67
1445	285.	0.371	0.011	0.317	0.328	******
1500	300.	0.401	0.011	0.314	0.322	3.59
1515	315.	0.437	0.014	0.281	0.295	******
1530	330.	0.475	0.013	0.280	0.293	3.52
1545	345.	0.510	0.012	0.272	0.284	******
1600	360.	0.545	0.011	0.259	0.270	3.44

EC -309
N-BUTANE 100 DEG F
1978 AUG 1

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM PANALYZR	C4-N-2 PPM C-600	C4-N-2 PPM PANALYZR	C4-N-1 PPM PANALYZR
830	-90.	******	******	******	0.001	0.0001	0.0005	0.0	0.0001	******	0.0	******	******
930	-30.	0.86	******	******	******	******	******	******	******	******	******	******	******
1000	0.	0.86	0.000	0.002	******	******	0.0010	0.0001	0.0003	0.0	0.0	0.0	0.0
1015	15.	******	******	******	******	******	******	******	******	******	******	******	******
1030	30.	******	0.002	******	0.041	******	0.0030	0.0010	0.0002	0.0000	0.0046	0.0029	0.0008
1045	45.	******	******	******	******	******	******	******	******	******	******	******	******
1100	60.	1.00	0.002	0.0	0.062	0.0003	0.0046	0.0015	0.0304	0.0001	0.0066	0.0042	0.0015
1115	75.	******	******	******	******	******	******	******	******	******	******	******	******
1130	90.	******	0.003	******	0.068	******	0.0021	******	0.0255	0.0002	0.0061	0.0057	0.0045
1145	105.	******	******	******	******	******	******	******	******	******	******	******	******
1200	120.	1.12	0.005	0.010	0.088	0.0003	0.0031	0.0021	0.0317	0.0003	0.0098	0.0070	0.0053
1215	135.	******	******	******	******	******	******	******	******	******	******	******	******
1230	150.	******	0.006	******	0.097	0.0003	0.0037	******	0.0356	0.0003	0.0113	0.0081	0.0075
1245	165.	******	******	******	******	******	******	******	******	******	******	******	******
1300	180.	1.25	0.008	0.019	0.116	0.0006	0.0047	0.0014	0.0405	0.0003	0.0128	0.0089	0.0075
1315	195.	******	******	******	******	******	******	******	******	******	******	******	******
1330	210.	******	0.011	******	0.120	0.0007	0.0077	******	0.0450	0.0004	0.0142	0.0104	0.0098
1345	225.	******	******	******	******	******	******	******	******	******	******	******	******
1400	240.	1.38	0.014	0.021	0.159	0.0008	0.0077	0.0013	0.0597	0.0005	0.0160	0.0115	0.0090
1415	255.	******	******	******	******	******	******	******	******	******	******	******	******
1430	270.	******	0.018	******	0.176	0.0022	0.0170	0.0045	0.0849	0.0005	0.0176	0.0130	0.0113
1445	285.	******	******	******	******	******	******	******	******	******	******	******	******
1500	300.	1.46	0.023	0.025	0.185	0.0010	0.0071	******	0.0650	0.0005	0.0197	0.0143	0.0135
1515	315.	******	******	******	******	******	******	******	******	******	******	******	******
1530	330.	******	0.027	******	0.197	0.0023	0.0096	0.0050	0.0752	0.0005	0.0218	0.0155	0.0150
1545	345.	******	******	******	******	******	******	******	******	******	******	******	******
1600	360.	1.70	0.034	0.031	0.226	0.0026	******	0.0047	0.1146	0.0006	0.0236	0.0168	0.0158

EC -309
N-BUTANE 100 DEG F
1976 AUG 1

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
830	-90.	******	******	******	******	******
930	-30.	******	******	******	******	******
1000	0.	101.1	30.0	15.40	0.261	20.00
1015	15.	99.4	32.0	******	0.269	******
1030	30.	98.9	34.5	******	0.264	******
1045	45.	100.4	35.5	******	0.269	******
1100	60.	101.1	35.5	15.40	0.261	20.00
1115	75.	100.9	35.5	******	0.261	******
1130	90.	101.1	35.5	******	******	******
1145	105.	101.1	35.5	******	******	******
1200	120.	101.1	35.5	15.00	0.259	20.00
1215	135.	101.1	35.0	******	******	******
1230	150.	100.9	35.5	******	******	******
1245	165.	100.9	35.0	******	******	******
1300	180.	101.1	35.0	15.20	0.261	20.00
1315	195.	101.1	35.0	******	******	******
1330	210.	101.1	35.0	******	******	******
1345	225.	101.4	35.0	******	******	******
1400	240.	101.4	35.0	15.20	******	20.00
1415	255.	101.6	34.5	******	0.254	******
1430	270.	101.6	34.5	******	0.252	******
1445	285.	100.9	34.5	******	0.254	******
1500	300.	101.6	34.5	15.52	0.264	20.00
1515	315.	******	******	******	******	******
1530	330.	******	******	******	******	******
1545	345.	******	******	******	******	******
1600	360.	******	******	15.60	******	20.00

EC -314
PROPENE
1978 OCT 10

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
NEGATIVE PEAK (APPROX -2 DIVISIONS) AT T=0 ON PAN CHART AT 1.25 MIN RT
BRAUN 1193X, DASIBI 1212 (555 ML/MIN), TECO 148-1 (585 ML/MIN)

T=0 AT 945 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	57.40
SSPOWER	KW	AVERAGE	16.27
RADIOM	MW/CM2	AVERAGE	0.260
H2O	PPM	AVERAGE	6.311E 04
NO	PPM	INIT COND	0.684
NO2-CORR	PPM	INIT COND	0.246
PROPENE	PPM	INIT COND	1.062
HCHO	PPM	INIT COND	0.045
ACETALD	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	1.455
ETHANE	PPM	INIT COND	0.010
ETHENE	PPM	INIT COND	0.004
ACETYLEN	PPM	INIT COND	0.005

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.746
430.	1.674
403.	1.560
380.	1.444
370.	1.299
360.	1.122
350.	1.000
340.	0.802
330.	0.556
320.	0.298
310.	0.112
300.	0.016
290.	0.000
280.	0.0

K1=0.48 MIN-1

SAMPLING RATE = 1.568 L/MIN

49 GC SAMPLES TAKEN

EC -314
PROPENE
1978 OCT 10

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
845	-60.	******	******	******	******	******
930	-15.	******	******	******	******	1.046
945	0.	0.0	0.684	0.246	0.918	1.062
1000	15.	0.0	0.557	0.361	0.913	0.973
1015	30.	0.0	0.430	0.467	0.890	0.891
1030	45.	0.007	0.322	0.546	0.868	0.814
1045	60.	0.017	0.230	0.616	0.836	0.732
1100	75.	0.049	0.159	0.648	0.800	0.657
1115	90.	0.086	0.103	0.666	0.768	0.580
1130	105.	0.130	0.078	0.656	0.732	0.492
1145	120.	0.191	0.051	0.636	0.692	0.436
1200	135.	0.249	0.042	0.602	0.639	0.370
1215	150.	0.303	0.034	0.557	0.584	0.304
1230	165.	0.354	0.027	0.506	0.531	0.253
1245	180.	0.406	0.024	0.458	0.473	0.201
1300	195.	0.447	0.017	0.418	0.435	0.161
1315	210.	0.491	0.020	0.383	0.395	0.126
1330	225.	0.530	0.022	0.331	0.348	0.099
1345	240.	0.562	0.020	0.289	0.302	0.074
1400	255.	0.594	0.015	0.249	0.261	0.057
1415	270.	0.623	0.012	0.212	0.220	0.045
1430	285.	0.652	0.012	0.213	0.220	0.032
1445	300.	0.677	0.015	0.213	0.223	0.023
1500	315.	0.696	0.015	0.170	0.178	0.017
1515	330.	0.713	0.012	0.130	0.137	0.014
1530	345.	0.723	0.012	0.131	0.139	0.010
1545	360.	0.728	0.015	0.129	0.136	0.006

EC -314
PROPENE
1978 OCT 10

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM
845	-60.	******	******	0.001	0.0001	0.0002	0.0001	0.0001	0.0	******	1.46	0.0103	0.0042	0.0053
930	-15.	******	******	******	******	******	******	******	******	******	******	******	******	******
945	0.	0.000	0.045	0.002	0.0001	0.0005	0.0001	0.0001	0.0	0.0	1.46	0.0099	0.0041	0.0046
1000	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	0.002	******	0.123	0.0014	0.0008	******	0.0002	******	0.0003	******	******	******	******
1030	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.009	0.222	0.225	0.0029	0.0018	0.0001	0.0003	0.0014	0.0005	******	******	******	******
1100	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	90.	0.022	******	0.265	0.0031	0.0020	0.0002	0.0003	0.0015	0.0009	******	******	******	******
1130	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	0.046	0.381	0.357	0.0037	0.0033	0.0004	0.0005	0.0022	0.0014	******	******	******	******
1200	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	******	******	0.441	0.0048	0.0045	0.0004	0.0006	0.0034	******	******	******	******	******
1230	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	0.120	******	0.430	0.0060	0.0057	0.0003	0.0007	0.0064	0.0030	1.44	0.0101	0.0034	0.0047
1300	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	0.133	0.519	0.408	0.0056	0.0061	******	0.0008	0.0054	0.0026	******	******	******	******
1330	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	0.157	0.523	0.355	0.0049	0.0115	******	0.0008	0.0069	0.0029	******	******	******	******
1400	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	0.190	******	0.317	0.0022	0.0050	******	0.0008	0.0025	0.0031	******	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.160	0.450	0.257	0.0021	0.0044	******	0.0009	0.0033	0.0026	******	******	******	******
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	0.226	******	0.267	0.0034	0.0073	******	0.0011	0.0051	0.0031	******	******	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	0.215	0.383	0.264	0.0032	0.0077	******	0.0010	0.0069	0.0031	1.46	0.0099	0.0025	0.0047

EC -314
PROPENE
1978 OCT 10

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
845	-60.	******	******	******	******	******
930	-15.	******	******	******	******	******
945	0.	84.6	******	16.44	******	20.00
1000	15.	84.6	46.5	******	0.261	******
1015	30.	84.6	50.5	******	******	******
1030	45.	84.6	53.5	******	******	******
1045	60.	85.4	55.0	16.00	0.256	20.00
1100	75.	86.1	55.5	******	******	******
1115	90.	86.4	56.0	******	******	******
1130	105.	86.1	56.5	******	******	******
1145	120.	86.4	57.0	16.24	0.261	20.00
1200	135.	86.6	57.0	******	******	******
1215	150.	86.6	57.0	******	******	******
1230	165.	86.6	57.0	******	******	******
1245	180.	86.8	57.0	16.00	******	******
1300	195.	86.8	57.0	******	0.256	******
1315	210.	86.6	58.0	******	0.256	20.00
1330	225.	86.1	59.5	******	0.261	******
1345	240.	86.1	60.0	16.40	0.261	20.00
1400	255.	85.9	60.5	******	0.261	******
1415	270.	86.1	60.5	******	******	******
1430	285.	85.9	60.5	******	******	******
1445	300.	85.9	60.5	16.36	0.264	20.00
1500	315.	86.1	60.5	******	0.261	******
1515	330.	86.4	60.5	******	0.261	******
1530	345.	86.6	60.5	******	0.261	******
1545	360.	86.6	61.0	16.44	0.261	20.00

EC -315
PROPENE 60 DEG F
1978 OCT 11

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
NEGATIVE PEAK (APPROX -1.5 DIVISIONS) AT T=0 ON PAN CHART AT 1.22 MIN RT
BRADY 1193X, DASIBI 1212 (555 ML/MIN), TECO 148-1 (585 ML/MIN)

T=0 AT 930 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	289.5
REL HUM	%	AVERAGE	57.18
SSPOWER	KW	AVERAGE	16.43
RADIOM	MW/CM2	AVERAGE	0.260
H2O	PPM	AVERAGE	1.040E 04
NO	PPM	INIT COND	0.664
NO2-CORR	PPM	INIT COND	0.276
PROPENE	PPM	INIT COND	0.967
HCHO	PPM	INIT COND	0.018
ACETALD	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.505
ETHANE	PPM	INIT COND	0.009
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.004

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.552
430.	1.584
403.	1.501
380.	1.423
370.	1.307
360.	1.133
350.	1.000
340.	0.807
330.	0.567
320.	0.316
310.	0.119
300.	0.017
290.	0.001
280.	0.0

K1=0.49 MIN-1

SAMPLING RATE = 1.500 L/MIN

50 GC SAMPLES TAKEN

EC -315
PROPENE 60 DEG F
1978 OCT 11

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
835	-55.	******	******	******	******	******
840	-50.	******	******	******	******	******
921	-9.	******	******	******	******	0.969
930	0.	0.000	0.664	0.276	0.942	0.967
945	15.	0.000	0.594	0.332	0.925	0.917
1000	30.	0.000	0.523	0.396	0.908	0.869
1015	45.	0.000	0.469	0.431	0.892	0.841
1030	60.	0.002	0.388	0.488	0.879	0.768
1045	75.	0.010	0.332	0.527	0.859	0.724
1100	90.	0.015	0.271	0.573	0.840	0.678
1115	105.	0.024	0.234	0.586	0.816	0.629
1130	120.	0.039	0.181	0.609	0.790	0.580
1145	135.	0.049	0.151	0.614	0.766	0.544
1200	150.	0.066	0.122	0.612	0.737	0.504
1215	165.	0.086	0.110	0.612	0.710	0.470
1230	180.	0.103	0.088	0.594	0.680	0.428
1245	195.	0.125	0.078	0.578	0.651	0.312
1300	210.	0.142	0.064	0.559	0.618	0.355
1315	225.	0.164	0.051	0.533	0.584	0.322
1330	240.	0.186	0.046	0.504	0.551	0.293
1345	255.	0.208	0.042	0.475	0.512	0.261
1400	270.	0.230	0.034	0.452	0.486	0.234
1415	285.	0.247	0.034	0.419	0.448	0.211
1430	300.	0.271	0.024	0.393	0.415	0.185
1445	315.	0.288	0.022	0.361	0.378	0.165
1500	330.	0.305	0.020	0.331	0.345	0.145
1515	345.	0.330	0.017	0.302	0.314	0.128
1530	360.	0.344	0.012	0.277	0.290	0.112

EC -315
PROPENE 60 DEG F
1978 OCT 11

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM
835	-55.	******	******	******	******	******	******	******	******	******	1.51	0.0085	0.0016	0.0030
840	-50.	******	******	0.001	0.0001	0.0003	******	******	0.0	******	******	******	******	******
921	-9.	******	******	******	******	******	******	******	******	******	******	******	******	******
930	0.	0.000	0.018	0.001	0.0001	0.0004	******	******	0.0	0.0	1.50	0.0091	0.0034	0.0037
945	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	0.001	******	0.060	0.0008	0.0004	0.0001	0.0002	******	0.0	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	0.003	0.146	0.137	0.0022	0.0006	0.0001	0.0003	0.0019	0.0	******	******	******	******
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	0.008	******	0.182	0.0029	0.0010	0.0002	0.0002	0.0021	0.0003	******	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	0.015	0.259	0.246	0.0041	0.0016	0.0003	0.0005	0.0040	0.0008	******	******	******	******
1145	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1200	150.	0.024	******	0.295	0.0049	0.0019	0.0004	0.0006	0.0055	0.0010	******	******	******	******
1215	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1230	180.	0.035	0.343	0.299	0.0047	0.0017	0.0004	0.0004	0.0047	0.0012	1.51	0.0095	0.0034	0.0035
1245	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1300	210.	0.047	******	0.362	0.0056	0.0036	0.0007	0.0008	0.0072	0.0016	******	******	******	******
1315	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1330	240.	0.061	0.372	0.345	0.0050	0.0027	0.0008	0.0007	0.0065	0.0019	******	******	******	******
1345	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1400	270.	0.074	******	0.379	0.0059	0.0061	0.0010	0.0011	0.0093	0.0020	******	******	******	******
1415	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1430	300.	0.091	0.383	0.382	0.0047	0.0048	0.0010	0.0011	0.0091	0.0022	******	******	******	******
1445	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1500	330.	0.107	******	0.349	0.0039	0.0027	0.0010	0.0009	0.0066	0.0023	******	******	******	******
1515	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1530	360.	0.116	0.372	0.382	0.0050	0.0068	0.0012	0.0013	0.0090	0.0024	1.49	0.0092	0.0028	0.0036

EC -315
PROPENE 60 DEG F
1978 OCT 11

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	PADIOM MW/CM2	HCHO VOL L
835	-55.	******	******	******	******	******
840	-50.	******	******	******	******	******
921	-9.	******	******	******	******	******
930	0.	58.9	38.5	16.60	******	15.00
945	15.	61.3	43.5	******	0.256	******
1000	30.	61.1	49.5	******	0.261	******
1015	45.	61.3	53.5	******	0.256	******
1030	60.	61.3	56.0	******	0.254	20.00
1045	75.	61.6	56.5	******	0.261	******
1100	90.	61.6	57.0	******	0.259	******
1115	105.	61.6	57.5	******	0.259	******
1130	120.	61.3	59.0	16.36	0.259	20.00
1145	135.	61.6	60.0	******	0.261	******
1200	150.	61.3	60.0	******	0.261	******
1215	165.	61.3	60.0	******	0.254	******
1230	180.	61.3	60.0	16.40	0.264	20.00
1245	195.	61.6	60.0	******	0.266	******
1300	210.	61.8	60.0	******	0.261	******
1315	225.	61.6	59.5	******	0.259	******
1330	240.	61.3	59.5	16.40	0.259	20.00
1345	255.	61.6	59.5	******	******	******
1400	270.	61.6	59.5	******	******	******
1415	285.	61.6	59.5	******	******	******
1430	300.	61.6	59.0	16.32	0.260	20.00
1445	315.	61.3	59.0	******	******	******
1500	330.	61.6	59.0	******	******	******
1515	345.	61.1	59.5	******	******	******
1530	360.	61.6	59.0	16.52	0.266	20.00

EC -316
PROPENE (102 DEG F)
1978 OCT 12

BEGIN IRRADIATION 1000; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
NEGATIVE PEAK (APPROX -1.5 DIVISIONS) AT T=0 ON PAN CHART AT 1.18 MIN RT
BRADY 1193X, DASIBI 1212 (555 ML/MIN), TECO 148-1 (585 ML/MIN)

T=0 AT 1000 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	312.1
REL HUM	%	AVERAGE	67.46
SSPOWER	KW	AVERAGE	17.42
RADIOM	MW/CM2	AVERAGE	0.262
H2O	PPM	AVERAGE	4.612E 04
NO	PPM	INIT COND	0.735
NO2-COPR	PPM	INIT COND	0.246
PROPENE	PPM	INIT COND	1.070
HCHO	PPM	INIT COND	0.017
ACETALD	PPM	INIT COND	0.004
ACETONE	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	1.552
ETHANE	PPM	INIT COND	0.008
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	1.469
430.	1.549
403.	1.481
380.	1.390
370.	1.283
360.	1.119
350.	1.000
340.	0.807
330.	0.565
320.	0.313
310.	0.118
300.	0.017
290.	0.001
280.	0.0

K1=0.51 MIN-1

SAMPLING RATE = 1.508 L/MIN

48 GC SAMPLES TAKEN

EC -316
PROPENE (102 DEG F)
1978 OCT 12

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
905	-55.	******	******	******	******	******
951	-9.	******	******	******	******	1.070
1000	0.	0.000	0.735	0.246	0.982	1.070
1015	15.	0.000	0.520	0.440	0.957	0.933
1030	30.	0.002	0.349	0.577	0.921	0.818
1045	45.	0.020	0.208	0.681	0.884	0.712
1100	60.	0.068	0.125	0.724	0.844	0.603
1115	75.	0.144	0.071	0.717	0.785	0.497
1130	90.	0.235	0.054	0.670	0.725	0.412
1145	105.	0.325	0.051	0.656	0.699	0.320
1200	120.	0.406	0.027	0.572	0.601	0.247
1215	135.	0.481	0.022	0.514	0.544	0.183
1230	150.	0.555	0.027	0.455	0.477	0.131
1245	165.	0.613	0.022	0.394	0.413	0.092
1300	180.	0.674	0.015	0.338	0.355	0.065
1315	195.	0.730	0.020	0.279	0.298	0.043
1330	210.	0.789	0.020	0.232	0.247	0.027
1345	225.	0.828	0.020	0.186	0.208	0.017
1400	240.	0.865	0.017	0.151	0.171	0.011
1415	255.	0.894	0.020	0.134	0.151	0.006
1430	270.	0.914	0.015	0.120	0.130	0.004
1445	285.	0.923	0.020	0.091	0.113	0.004
1500	300.	0.936	0.010	0.069	0.082	******
1515	315.	0.940	0.017	0.055	0.068	0.003
1530	330.	0.945	0.015	0.058	0.071	******
1545	345.	0.950	0.010	0.060	0.077	0.002
1600	360.	0.953	0.017	0.069	0.083	0.002

EC -316
PROPENE (102 DEG F)
1978 OCT 12

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	PROX PPM	ME-N PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM
905	-55.	******	******	0.002	0.0002	0.0009	0.0001	0.0	******	1.56	0.0087	0.0031	0.0034
951	-9.	******	******	******	******	******	******	******	******	******	******	******	******
1000	0.	0.000	0.017	0.004	0.0002	0.0022	0.0001	0.0	0.0	1.55	0.0081	0.0030	0.0032
1015	15.	******	******	******	******	******	******	******	******	******	******	******	******
1030	30.	0.004	******	0.171	0.0013	0.0036	0.0002	******	0.0007	******	******	******	******
1045	45.	******	******	******	******	******	******	******	******	******	******	******	******
1100	60.	0.020	0.318	0.261	0.0025	0.0038	0.0002	******	0.0010	******	******	******	******
1115	75.	******	******	******	******	******	******	******	******	******	******	******	******
1130	90.	0.047	******	0.423	0.0052	0.0133	0.0004	0.0048	0.0023	******	******	******	******
1145	105.	******	******	******	******	******	******	******	******	******	******	******	******
1200	120.	0.082	0.560	0.489	0.0058	0.0173	0.0006	0.0062	0.0030	******	******	******	******
1215	135.	******	******	******	******	******	******	******	******	******	******	******	******
1230	150.	0.109	******	0.454	0.0051	0.0216	0.0008	0.0055	0.0036	******	******	******	******
1245	165.	******	******	******	******	******	******	******	******	******	******	******	******
1300	180.	0.156	0.586	0.381	0.0034	0.0079	0.0003	0.0028	0.0042	1.57	0.0088	0.0024	0.0033
1315	195.	******	******	******	******	******	******	******	******	******	******	******	******
1330	210.	0.196	******	0.380	0.0068	0.0307	0.0014	0.0071	0.0038	******	******	******	******
1345	225.	******	******	******	******	******	******	******	******	******	******	******	******
1400	240.	0.220	0.526	0.340	0.0034	0.0137	0.0007	0.0035	0.0048	******	******	******	******
1415	255.	******	******	******	******	******	******	******	******	******	******	******	******
1430	270.	0.230	******	0.262	0.0069	0.0303	0.0013	0.0072	0.0047	******	******	******	******
1445	285.	******	******	******	******	******	******	******	******	******	******	******	******
1500	300.	0.270	0.452	0.190	0.0035	0.0133	0.0009	0.0032	0.0022	******	******	******	******
1515	315.	******	******	******	******	******	******	******	******	******	******	******	******
1530	330.	0.264	******	0.149	0.0046	0.0142	0.0009	0.0051	0.0020	******	******	******	******
1545	345.	******	******	******	******	******	******	******	******	******	******	******	******
1600	360.	0.247	0.372	0.115	0.0066	0.0109	0.0007	0.0034	0.0018	1.55	0.0087	0.0017	0.0032

EC -316
PROPENE (102 DEG F)
1978 OCT 12

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kb	RADIOM MW/CM2	HCHO VOL L
905	-55.	******	******	******	******	******
951	-9.	******	******	******	******	******
1000	0.	102.6	59.5	16.44	0.249	20.00
1015	15.	100.6	61.5	******	0.264	******
1030	30.	100.1	64.0	******	0.256	******
1045	45.	100.4	65.5	******	0.254	******
1100	60.	101.1	66.5	16.93	0.266	20.00
1115	75.	101.4	66.5	******	0.259	******
1130	90.	102.1	66.5	******	0.266	******
1145	105.	102.1	66.5	******	0.259	******
1200	120.	102.1	66.5	16.93	0.261	20.00
1215	135.	102.1	67.0	******	******	******
1230	150.	101.9	67.5	******	******	******
1245	165.	101.9	67.5	******	0.266	******
1300	180.	102.8	67.5	17.18	0.266	20.00
1315	195.	102.6	67.5	******	0.266	******
1330	210.	103.8	67.5	******	0.264	******
1345	225.	102.8	68.0	******	0.264	******
1400	240.	102.3	69.0	17.68	0.264	20.00
1415	255.	102.1	69.5	******	0.261	******
1430	270.	101.9	70.0	******	0.256	******
1445	285.	102.1	70.0	******	0.254	******
1500	300.	102.3	70.0	18.27	0.266	20.00
1515	315.	101.9	70.0	******	******	******
1530	330.	102.3	70.0	******	******	******
1545	345.	101.9	70.0	******	0.269	******
1600	360.	102.8	70.0	18.53	0.271	20.00

EC -317
PROPENE
1978 OCT 16

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
BRADY 1193X, DASIBI 1212 (555 ML/MIN), TECO 14B-1 (585 ML/MIN)

T=0 AT 945 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.8
REL HUM	%	AVERAGE	58.80
SSPOWER	KW	AVERAGE	17.99
RADIOM	MW/CM2	AVERAGE	0.261
H2O	PPM	AVERAGE	2.540E 04
NO	PPM	INIT COND	0.256
NO2-CORR	PPM	INIT COND	0.281
PROPENE	PPM	INIT COND	0.493
HCHO	PPM	INIT COND	0.007
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.001
ETHANE	PPM	INIT COND	0.009
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.004

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	1.470
490.	1.516
480.	1.452
380.	1.373
370.	1.269
360.	1.110
350.	1.000
340.	0.810
330.	0.562
320.	0.310
310.	0.117
300.	0.017
290.	0.001
280.	0.000
270.	0.0

K1=0.53 MIN-1

SAMPLING RATE = 1.500 L/MIN

49 GC SAMPLES TAKEN

EC -317
PROPENE
1978 OCT 16

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM
855	-50.	******	******	******	******	******
930	-15.	******	******	******	******	0.485
945	0.	0.0	0.256	0.281	0.530	0.493
1000	15.	0.012	0.206	0.315	0.516	0.432
1015	30.	0.027	0.150	0.355	0.502	0.396
1030	45.	0.051	0.103	0.392	0.488	0.351
1045	60.	0.085	0.074	0.391	0.467	0.306
1100	75.	0.125	0.054	0.397	0.449	0.266
1115	90.	0.166	0.042	0.383	0.426	0.236
1130	105.	0.203	0.033	0.370	0.401	0.191
1145	120.	0.244	0.029	0.351	0.377	0.161
1200	135.	0.276	0.027	0.322	0.346	0.134
1215	150.	0.315	0.022	0.305	0.323	0.108
1230	165.	0.344	0.018	0.282	0.297	0.090
1245	180.	0.374	0.016	0.262	0.277	0.071
1300	195.	0.401	0.013	0.240	0.251	0.058
1315	210.	0.427	0.015	0.219	0.227	0.045
1330	225.	0.452	0.015	0.195	0.205	0.036
1345	240.	0.479	0.011	0.178	0.188	0.028
1400	255.	0.503	0.013	0.160	0.168	0.021
1415	270.	0.523	0.011	0.145	0.151	0.016
1430	285.	0.542	0.007	0.134	0.143	0.013
1445	300.	0.557	0.007	0.123	0.136	0.009
1500	315.	0.576	0.004	0.107	0.116	0.007
1515	330.	0.589	0.006	0.101	0.109	0.005
1530	345.	0.596	0.012	0.096	0.104	0.004
1545	360.	0.606	0.012	0.091	0.104	0.003
1600	375.	0.608	0.013	0.094	0.104	******
1615	390.	0.613	0.005	0.094	0.103	******

EC -317
PROPENE
1978 OCT 16

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	PROX PPM	ME-N PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM
855	-50.	******	******	0.002	0.0002	0.0002	0.0001	0.0	******	1.57	0.0091	0.0035	0.0042
930	-15.	******	******	******	******	******	******	******	******	******	******	******	******
945	0.	0.000	0.007	0.002	0.0002	0.0005	0.0001	0.0	0.0	******	0.0090	0.0033	0.0041
1000	15.	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	0.003	******	0.002	0.0007	0.0019	0.0001	******	0.0	******	******	******	******
1030	45.	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.010	0.159	0.114	0.0009	0.0012	0.0003	******	0.0004	******	******	******	******
1100	75.	******	******	******	******	******	******	******	******	******	******	******	******
1115	90.	0.022	******	0.163	0.0014	0.0043	0.0005	******	0.0007	******	******	******	******
1130	105.	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	0.035	0.222	0.193	0.0025	0.0071	0.0005	******	0.0007	******	******	******	******
1200	135.	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	0.050	******	0.202	0.0022	0.0027	0.0006	******	0.0010	******	******	******	******
1230	165.	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	0.065	0.268	0.205	0.0028	0.0088	0.0009	0.0010	0.0013	1.58	0.0087	0.0026	0.0039
1300	195.	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	0.076	******	0.198	0.0029	0.0086	0.0010	0.0014	0.0013	******	******	******	******
1330	225.	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	******	0.254	0.170	0.0027	0.0099	0.0011	0.0011	******	******	******	******	******
1400	255.	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	0.107	******	0.164	0.0037	0.0112	0.0011	0.0017	0.0014	******	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.114	0.218	0.116	0.0021	0.0041	0.0010	******	0.0014	******	******	******	******
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	0.126	******	0.118	0.0032	0.0066	0.0012	0.0015	0.0014	******	******	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	0.130	0.190	0.089	0.0026	0.0043	0.0010	0.0005	0.0014	1.56	0.0085	0.0018	0.0036
1600	375.	******	******	******	******	******	******	******	******	******	******	******	******
1615	390.	******	******	******	******	******	******	******	******	******	******	******	******

EC -317
PROPENE
1978 OCT 16

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kw	RADION MW/CM2	HCHO VOL L
855	-50.	******	******	******	******	******
930	-15.	******	******	******	******	******
945	0.	82.8	44.5	******	0.247	15.00
1000	15.	85.2	48.0	******	0.259	******
1015	30.	85.2	52.0	18.05	0.254	******
1030	45.	86.2	55.0	******	0.269	******
1045	60.	87.0	56.0	17.89	0.259	20.00
1100	75.	87.2	56.5	******	******	******
1115	90.	87.9	56.5	******	******	******
1130	105.	87.9	56.5	******	******	******
1145	120.	87.4	57.5	17.60	0.261	20.00
1200	135.	87.7	58.5	******	0.259	******
1215	150.	87.4	59.5	******	******	******
1230	165.	87.2	60.0	******	******	******
1245	180.	86.7	61.0	17.81	0.261	20.00
1300	195.	87.2	61.5	******	******	******
1315	210.	87.0	62.0	******	******	******
1330	225.	87.0	62.0	******	******	******
1345	240.	87.2	62.0	******	******	20.00
1400	255.	87.2	62.0	******	******	******
1415	270.	87.2	62.0	******	******	******
1430	285.	87.2	61.5	******	******	******
1445	300.	87.2	62.0	17.93	0.259	20.00
1500	315.	87.2	61.5	******	0.252	******
1515	330.	87.4	61.5	******	0.264	******
1530	345.	87.7	61.5	******	0.269	******
1545	360.	87.7	61.0	18.49	0.266	20.00
1600	375.	87.7	61.5	******	0.264	******
1615	390.	87.4	61.5	******	0.269	******

EC -318
PROPENE + PAN
1978 OCT 17

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
2-C3ONO2 IS SUM OF 2-C3ONO2 & C2ONO2
BRADY 1193X, DASIBI 1212 (555 ML/MIN), TECO 148-1 (585 ML/MIN)

0850: PROPENE AND 1.047 LITERS PAN FROM TANK #10 ADDED. 0857-0859: FANS ON.
0905-0920: NO2-UNCORR (TECO 148-1) = 0.138 PPM
0920: NO2 ADDED. 0924: NO ADDED. 0923-0925: FANS ON.
0925: NO = 0.210 PPM. NO2-UNCORR (TECO 148-1) = 0.358 PPM.

T=0 AT 930 PDT

	CALID#
HCHO	3
PAN	9
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	60.24
SSPOWER	KW	AVERAGE	18.14
RADIOM	MW/CM2	AVERAGE	0.260
H2O	PPM	AVERAGE	3.736E 04
NO	PPM	INIT COND	0.172
NO2-CORR	PPM	INIT COND	0.331
PROPENE	PPM	INIT COND	0.509
PAN	PPM	INIT COND	0.072
HCHO	PPM	INIT COND	0.019
ACETONE	PPM	INIT COND	0.001
ME-N	PPM	INIT COND	0.014
C3-N-1	PPM	INIT COND	0.004
C3-N-2	PPM	INIT COND	0.001
C4-N-2	PPM	INIT COND	0.005
METHANE	PPM	INIT COND	1.335
ETHANE	PPM	INIT COND	0.008
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

EC -318
PROPENE + PAN
1978 OCT 17

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.485
430.	1.572
403.	1.513
380.	1.413
370.	1.278
360.	1.117
350.	1.000
340.	0.810
330.	0.555
320.	0.304
310.	0.115
300.	0.017
290.	0.000
280.	0.0

K1=0.53 MIN-1

SAMPLING RATE = 1.489 L/MIN

62 GC SAMPLES TAKEN

EC -318
PROPENE + PAN
1978 OCT 17

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	PAN PPM
830	-60.	******	******	******	******	0.000	******
905	-25.	******	******	******	******	0.535	******
915	-15.	******	******	******	******	******	0.125
930	0.	0.0	0.172	0.276	0.918	0.509	0.072
945	15.	0.081	0.083	0.303	0.874	0.397	0.062
1000	30.	0.159	0.049	0.348	0.791	0.345	0.063
1015	45.	0.232	0.046	0.378	0.706	0.276	0.065
1030	60.	0.291	0.029	0.394	0.596	0.232	0.073
1045	75.	0.349	0.023	0.388	0.496	0.176	0.076
1100	90.	0.396	0.017	0.390	0.413	0.137	0.084
1115	105.	0.435	0.017	0.369	0.374	0.109	0.093
1130	120.	0.471	0.016	0.355	0.354	0.083	0.102
1145	135.	0.506	0.010	0.336	0.0	0.062	0.110
1200	150.	0.535	0.013	0.310	0.0	0.046	0.119
1215	165.	0.564	0.010	0.290	0.0	0.035	0.126
1230	180.	0.591	0.010	0.267	0.0	0.026	0.131
1245	195.	0.616	0.009	0.248	0.0	0.019	0.142
1300	210.	0.638	0.012	0.224	0.0	0.014	0.149
1315	225.	0.652	0.010	0.245	0.119	0.010	0.155
1330	240.	0.664	0.013	0.203	0.108	0.007	0.153
1345	255.	0.679	0.007	0.162	0.106	0.005	0.155
1400	270.	0.686	0.007	0.150	0.101	0.003	0.157
1415	285.	0.689	0.009	0.136	0.102	0.002	0.166
1430	300.	0.689	0.012	0.129	0.094	0.002	0.162
1445	315.	0.689	0.010	0.114	0.094	0.001	0.161
1500	330.	0.684	0.016	0.106	0.092	0.001	0.162
1515	345.	0.684	0.006	0.102	0.092	0.001	0.158
1530	360.	0.684	0.009	0.095	0.094	0.000	0.153

EC -318
PROPENE + PAN
1978 OCT 17

CLOCK TIME	ELAPSED T(MIN)	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	PROX PPM	ME-N PPM PANALYZR	C3-N-1 PPM C-600	C3-N-2 PPM PANALYZR	C4-N-2 PPM C-600	METHANE PPM	ETHANE PPM	ETHENE PPM
830	-60.	******	0.001	0.0001	0.0003	0.0	0.0	******	0.0009	******	0.0003	1.35	0.0076	0.0026
905	-25.	******	0.002	0.0031	0.0006	******	******	******	0.0038	******	0.0046	1.34	0.0078	0.0028
915	-15.	******	******	******	******	******	******	0.0154	******	0.0012	******	******	******	******
930	0.	0.019	******	******	0.0009	******	******	0.0140	0.0037	0.0012	0.0046	1.34	0.0078	0.0028
945	15.	******	******	******	******	******	******	0.0145	******	0.0014	******	******	******	******
1000	30.	******	0.130	0.0014	0.0047	******	******	0.0145	0.0037	0.0012	0.0043	******	******	******
1015	45.	******	******	******	******	******	******	0.0148	******	0.0013	******	******	******	******
1030	60.	******	0.163	0.0013	0.0033	0.0002	******	0.0149	0.0037	0.0011	0.0033	******	******	******
1045	75.	0.019	******	******	******	******	******	0.0144	******	0.0010	******	******	******	******
1100	90.	******	0.193	0.0022	0.0063	0.0005	******	0.0150	0.0036	0.0015	0.0038	******	******	******
1115	105.	******	******	******	******	******	******	0.0145	******	0.0011	******	******	******	******
1130	120.	******	0.216	0.0034	0.0113	0.0007	******	0.0146	******	0.0011	0.0045	******	******	******
1145	135.	0.297	******	******	******	******	******	0.0146	******	0.0011	******	******	******	******
1200	150.	******	0.198	0.0035	0.0087	0.0007	******	0.0145	******	0.0010	0.0036	******	******	******
1215	165.	******	******	******	******	******	******	0.0144	******	0.0011	******	******	******	******
1230	180.	******	0.182	0.0036	0.0103	0.0008	******	0.0144	******	0.0013	0.0035	1.34	0.0077	0.0020
1245	195.	0.266	******	******	******	******	******	0.0143	******	0.0011	******	******	******	******
1300	210.	******	0.146	0.0036	0.0138	0.0009	******	0.0141	******	0.0011	0.0035	******	******	******
1315	225.	******	******	******	******	******	******	0.0141	******	0.0011	******	******	******	******
1330	240.	******	0.123	0.0039	0.0109	0.0006	******	0.0140	******	0.0008	******	******	******	******
1345	255.	0.236	******	******	******	******	******	0.0138	******	0.0011	******	******	******	******
1400	270.	******	0.101	0.0037	0.0132	0.0012	0.0006	0.0140	******	0.0011	******	******	******	******
1415	285.	******	******	******	******	******	******	0.0140	******	0.0011	******	******	******	******
1430	300.	******	0.066	0.0059	0.0040	0.0005	******	0.0137	******	0.0011	******	1.34	0.0074	0.0015
1445	315.	0.182	******	******	******	******	******	0.0135	******	0.0014	******	******	******	******
1500	330.	******	0.056	0.0053	0.0109	0.0003	0.0004	0.0135	0.0031	0.0011	******	******	******	******
1515	345.	******	******	******	******	******	******	0.0134	******	0.0011	******	******	******	******
1530	360.	******	0.065	0.0045	0.0164	0.0006	0.0011	0.0137	0.0034	0.0011	0.0031	******	******	******

EC -318
PROPENE + PAN
1978 OCT 17

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM	PROPANE PPM	I-C4 PPM
830	-60.	0.0033	0.0010	0.0001
905	-25.	0.0034	******	******
915	-15.	******	******	******
930	0.	0.0034	******	******
945	15.	******	******	******
1000	30.	******	******	******
1015	45.	******	******	******
1030	60.	******	******	******
1045	75.	******	******	******
1100	90.	******	******	******
1115	105.	******	******	******
1130	120.	******	******	******
1145	135.	******	******	******
1200	150.	******	******	******
1215	165.	******	******	******
1230	180.	0.0031	******	******
1245	195.	******	******	******
1300	210.	******	******	******
1315	225.	******	******	******
1330	240.	******	******	******
1345	255.	******	******	******
1400	270.	******	******	******
1415	285.	******	******	******
1430	300.	0.0028	******	******
1445	315.	******	******	******
1500	330.	******	******	******
1515	345.	******	******	******
1530	360.	******	******	******

EC -318
PROPENE + PAN
1978 OCT 17

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
830	-60.	******	******	******	******	******
900	-25.	******	******	******	******	******
915	-15.	******	******	17.40	******	******
930	0.	85.7	******	18.17	0.256	20.00
945	15.	86.0	63.0	******	0.269	******
1000	30.	87.7	64.0	******	0.264	******
1015	45.	88.4	64.5	******	0.259	******
1030	60.	87.7	64.5	******	0.256	******
1045	75.	88.2	65.5	17.93	0.259	20.00
1100	90.	88.7	65.5	******	0.261	******
1115	105.	87.4	66.5	******	0.261	******
1130	120.	87.4	67.5	******	0.256	******
1145	135.	87.4	67.5	18.27	0.259	20.00
1200	150.	87.7	68.0	******	0.264	******
1215	165.	87.9	68.0	******	0.259	******
1230	180.	87.9	68.0	******	0.261	******
1245	195.	88.2	68.0	18.19	0.256	20.00
1300	210.	88.4	68.0	******	0.261	******
1315	225.	88.2	68.0	******	0.261	******
1330	240.	88.2	68.0	******	0.259	******
1345	255.	88.9	67.5	18.14	0.256	20.00
1400	270.	90.4	66.5	******	0.261	******
1415	285.	89.6	66.0	******	0.256	******
1430	300.	88.2	67.0	******	0.254	******
1445	315.	87.7	67.5	18.14	0.259	20.00
1500	330.	87.2	68.5	******	0.256	******
1515	345.	87.4	68.5	******	0.264	******
1530	360.	87.4	68.5	******	0.269	******

EC -319
PROPENE + PAN
1978 OCT 18

BEGIN IRRADIATION 1130; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
2-C3UNO2 IS SUM OF 2-C3GNO2 & C2UNO2
BRADY 1193X, DASIBI 1212 (555 ML/MIN), TECO 148-1 (585 ML/MIN)

1044: PROPENE AND 1.047 LITERS PAN FROM TANK #10 ADDED.
1100: ADDITIONAL 1.047 LITERS PAN FROM TANK #10 ADDED. 1053-1110: FANS ON.
1123: NO2 AND NO ADDED. 1123-1129.5: FANS ON.

T=0 AT 1130 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.9
REL HUM	%	AVERAGE	59.02
SSPOWER	KW	AVERAGE	18.79
RADIOM	MW/CM2	AVERAGE	0.260
H2O	PPM	AVERAGE	2.410E 04
NO	PPM	INIT COND	0.100
NO2-CORR	PPM	INIT COND	0.430
PROPENE	PPM	INIT COND	0.502
PAN	PPM	INIT COND	0.149
HCHO	PPM	INIT COND	0.029
ACETALD.	PPM	INIT COND	0.030
ACETONE	PPM	INIT COND	0.001
ME-N	PPM	INIT COND	0.029
C2-N	PPM	INIT COND	0.007
C3-N-2	PPM	INIT COND	0.003
C4-N-2	PPM	INIT COND	0.010
METHANE	PPM	INIT COND	1.419
ETHANE	PPM	INIT COND	0.010
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.005

* ASSIGNED INITIAL CONDITION

EC -319
PROPENE + PAN
1978 OCT 18

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.672
430.	1.653
403.	1.605
380.	1.435
370.	1.306
360.	1.129
350.	1.000
340.	0.790
330.	0.542
320.	0.291
310.	0.100
300.	0.008
290.	0.0

K1=0.55 MIN-1

SAMPLING RATE = 1.513 L/MIN

58 GC SAMPLES TAKEN

EC -319
PROPENE + PAN
1978 OCT 18

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	PAN PPM
1025	-65.	******	******	******	******	0.000	******
1110	-20.	0.000	0.007	0.051	0.056	0.545	******
1115	-15.	0.000	0.010	0.051	0.056	******	0.157
1130	0.	0.0	0.100	0.430	0.530	0.502	0.149
1145	15.	0.147	0.059	0.436	0.514	0.391	0.134
1200	30.	0.244	0.039	0.460	0.482	0.325	0.128
1215	45.	0.320	0.024	0.426	0.452	0.264	0.129
1230	60.	0.396	0.024	0.392	0.414	0.198	0.140
1245	75.	0.447	0.015	0.360	0.369	0.150	0.146
1300	90.	0.498	0.020	0.319	0.332	0.117	0.152
1315	105.	0.542	0.012	0.292	0.305	0.087	0.158
1330	120.	0.579	0.015	0.264	0.269	0.066	0.169
1345	135.	0.613	0.012	0.236	0.244	0.048	0.173
1400	150.	0.645	0.015	0.193	0.200	0.034	0.192
1415	165.	0.672	0.012	0.178	0.188	0.025	0.196
1430	180.	0.699	0.007	0.144	0.156	0.018	0.207
1445	195.	0.716	0.012	0.132	0.144	0.013	0.203
1500	210.	0.733	0.010	0.122	0.125	0.009	0.213
1515	225.	0.745	0.010	0.119	0.113	0.006	0.219
1530	240.	0.750	0.012	0.118	0.123	0.005	0.212
1545	255.	0.755	0.010	0.113	0.120	0.003	******
1600	270.	0.752	0.010	0.120	0.125	0.002	0.208
1615	285.	0.750	0.012	0.105	0.120	0.002	******
1630	300.	0.752	0.010	0.117	0.115	0.001	0.213
1645	315.	0.747	0.012	0.111	0.102	0.001	******
1700	330.	0.747	0.007	0.105	0.103	0.001	0.213
1715	345.	0.750	0.007	0.105	0.110	0.300	******
1730	360.	0.747	0.010	0.102	0.105	0.000	0.207

EC -319
PROPENE + PAN
1978 OCT 18

CLOCK TIME	ELAPSED T(MIN)	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	PROX PPM	ME-N PPM	C2-N PPM C-600	C3-N-2 PPM PANALYZR	C4-N-2 PPM C-600	METHANE PPM	ETHANE PPM	ETHENE PPM
1025	-65.	******	0.001	0.0001	0.0004	0.0001	0.0	******	0.0012	******	0.0008	1.44	0.0094	0.0032
1110	-20.	******	0.002	0.0001	0.0008	******	******	******	0.0068	******	0.0095	1.42	0.0094	0.0033
1115	-15.	******	******	******	******	******	******	0.0294	******	0.0022	******	******	******	******
1130	0.	0.029	0.030	******	0.0010	******	******	0.0293	0.0066	0.0027	0.0098	1.42	0.0097	0.0032
1145	15.	******	******	******	******	******	******	******	******	0.0016	******	******	******	******
1200	30.	******	0.139	0.0012	0.0065	******	******	0.0268	******	0.0022	******	******	******	******
1215	45.	******	******	******	******	******	******	0.0268	******	0.0015	******	******	******	******
1230	60.	0.286	0.189	0.0021	0.0046	0.0001	******	0.0290	******	0.0022	******	******	******	******
1245	75.	******	******	******	******	******	******	0.0295	******	0.0022	******	******	******	******
1300	90.	******	0.201	0.0023	0.0054	0.0002	******	0.0298	******	0.0022	******	******	******	******
1315	105.	******	******	******	******	******	******	0.0290	******	0.0022	******	******	******	******
1330	120.	0.316	0.208	0.0032	0.0106	0.0005	******	0.0295	******	0.0020	******	******	******	******
1345	135.	******	******	******	******	******	******	0.0284	******	0.0022	******	******	******	******
1400	150.	******	0.196	0.0036	0.0103	******	******	0.0299	******	0.0020	******	******	******	******
1415	165.	******	******	******	******	******	******	0.0289	******	0.0014	******	******	******	******
1430	180.	0.287	0.148	0.0040	0.0104	0.0005	******	0.0298	******	0.0016	******	1.43	0.0095	0.0022
1445	195.	******	******	******	******	******	******	0.0281	******	0.0023	******	******	******	******
1500	210.	******	0.117	0.0043	0.0048	0.0004	******	0.0289	******	0.0016	******	******	******	******
1515	225.	******	******	******	******	******	******	0.0288	******	0.0011	******	******	******	******
1530	240.	0.226	0.126	0.0046	0.0163	0.0006	0.0010	0.0280	******	0.0021	******	******	******	******
1545	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1600	270.	******	0.102	0.0050	0.0123	0.0006	0.0007	0.0277	******	0.0011	******	******	******	******
1615	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1630	300.	0.191	0.073	0.0038	0.0050	0.0004	******	0.0278	0.0060	0.0022	0.0048	******	******	******
1645	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1700	330.	******	0.074	0.0044	0.0160	0.0006	0.0009	0.0284	0.0066	0.0016	0.0063	******	******	******
1715	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1730	360.	0.184	0.051	0.0043	0.0058	0.0004	******	0.0277	0.0058	0.0021	0.0045	1.42	0.0091	0.0012

EC -319
PROPENE + PAN
1976 OCT 18

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM	PROPANE PPM	I-C4 PPM
1025	-65.	0.0046	0.0012	0.0001
1110	-20.	0.0046	******	******
1115	-15.	******	******	******
1130	0.	0.0045	******	******
1145	15.	******	******	******
1200	30.	******	******	******
1215	45.	******	******	******
1230	60.	******	******	******
1245	75.	******	******	******
1300	90.	******	******	******
1315	105.	******	******	******
1330	120.	******	******	******
1345	135.	******	******	******
1400	150.	******	******	******
1415	165.	******	******	******
1430	180.	0.0046	******	******
1445	195.	******	******	******
1500	210.	******	******	******
1515	225.	******	******	******
1530	240.	******	******	******
1545	255.	******	******	******
1600	270.	******	******	******
1615	285.	******	******	******
1630	300.	******	******	******
1645	315.	******	******	******
1700	330.	******	******	******
1715	345.	******	******	******
1730	360.	0.0039	******	******

EC -319
PROPENE + PAN
1978 OCT 18

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUX %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
1025	-65.	******	******	******	******	******
1110	-20.	84.0	44.0	******	******	******
1115	-15.	84.3	44.0	******	******	******
1130	0.	84.3	43.0	18.48	0.261	20.00
1145	15.	85.7	46.0	******	0.264	******
1200	30.	85.2	50.5	******	0.259	******
1215	45.	85.7	53.0	******	0.254	******
1230	60.	87.0	54.5	18.48	0.261	20.00
1245	75.	85.5	56.0	******	0.271	******
1300	90.	85.5	59.0	******	******	******
1315	105.	85.7	60.5	******	******	******
1330	120.	85.7	61.0	******	0.261	20.00
1345	135.	86.7	61.0	******	0.261	******
1400	150.	86.7	61.0	******	0.259	******
1415	165.	86.7	62.0	******	0.259	******
1430	180.	86.7	63.5	18.92	0.259	20.00
1445	195.	86.0	64.5	******	0.256	******
1500	210.	85.7	65.5	******	0.259	******
1515	225.	87.0	65.5	******	0.261	******
1530	240.	86.2	65.5	18.92	0.264	20.00
1545	255.	86.5	65.5	******	0.261	******
1600	270.	86.7	65.5	******	0.259	******
1615	285.	85.7	65.5	******	0.252	******
1630	300.	85.5	65.5	18.79	0.256	20.00
1645	315.	86.0	65.5	******	0.261	******
1700	330.	85.7	65.5	******	0.264	******
1715	345.	85.7	66.0	******	0.266	******
1730	360.	85.2	66.0	19.18	0.264	20.00

EC -320
PROPENE + PAN
1978 OCT 19

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
2-C3ONO2 IS THE SUM OF 2-C3ONO2 & C2CNO2
BRADY 1193X, DASIBI 1212 (555 ML/MIN), TECO 14B-1 (585 ML/MIN)

0903: PROPENE ADDED. REFILL AIR BAG, FOUND ACCIDENTLY LEFT OPEN, IS CLOSED
0906: APPROX 500 ML PAN FROM TANK #10 ADDED. 0904-0911: FANS ON.
0940: NO2 AND NO ADDED. 0939-0958: FANS ON.

T=0 AT 945 PDT

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.6
REL HUM	%	AVERAGE	65.42
SSPOWER	KW	AVERAGE	16.76
RADIUM	MW/CM2	AVERAGE	0.149
H2O	PPM	AVERAGE	4.064E 04
NO	PPM	INIT COND	0.222
NO2-CORR	PPM	INIT COND	0.290
PROPENE	PPM	INIT COND	0.536
PAN	PPM	INIT COND	0.036
ACETALD	PPM	INIT COND	0.011
ME-N	PPM	INIT COND	0.008
C2-N	PPM	INIT COND	0.002
C4-N-2	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	1.468
ETHANE	PPM	INIT COND	0.008
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.004

* ASSIGNED INITIAL CONDITION

EC -320
PROPENE + PAN
1978 OCT 19

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	1.579
430.	1.673
403.	1.512
380.	1.408
370.	1.345
360.	1.135
350.	1.000
340.	0.812
330.	0.565
320.	0.299
310.	0.103
300.	0.014
290.	0.0

K1=0.55 MIN-1

SAMPLING RATE = 1.510 L/MIN

53 GC SAMPLES TAKEN

EC -320
PROPENE + PAN
1978 OCT 19

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	PROPENE PPM	PAN PPM
840	-65.	******	******	******	******	0.000	******
900	-45.	******	******	******	******	******	0.000
920	-25.	******	******	******	******	0.554	******
945	0.	0.000	0.222	0.290	0.512	0.536	0.036
1000	15.	0.034	0.144	0.354	0.500	0.452	0.027
1015	30.	0.078	0.088	0.396	0.484	0.404	0.027
1030	45.	0.120	0.059	0.405	0.464	0.335	0.029
1045	60.	0.173	0.045	0.395	0.442	0.295	0.033
1100	75.	0.222	0.037	0.380	0.414	0.238	0.037
1115	90.	0.266	0.032	0.356	0.384	0.196	0.046
1130	105.	0.310	0.024	0.335	0.355	0.163	0.051
1145	120.	0.349	0.021	0.308	0.327	0.132	0.058
1200	135.	0.384	0.017	0.282	0.297	0.103	******
1215	150.	0.420	0.038	0.233	0.269	0.084	0.075
1230	165.	0.452	0.012	0.227	0.241	0.065	0.087
1245	180.	0.481	0.011	0.205	0.218	0.049	0.093
1300	195.	0.508	0.012	0.183	0.195	0.038	******
1315	210.	0.533	0.011	0.166	0.177	******	******
1330	225.	0.557	0.010	0.150	0.157	0.024	0.109
1345	240.	0.579	0.010	0.129	0.137	0.017	0.119
1400	255.	0.596	0.016	0.119	0.135	0.012	******
1415	270.	0.616	0.012	0.102	0.111	0.009	0.131
1430	285.	0.628	0.011	0.101	0.112	0.007	******
1445	300.	0.638	0.009	0.092	0.100	0.005	0.136
1500	315.	0.638	0.010	0.084	0.094	******	******
1515	330.	0.642	0.010	0.082	0.091	0.003	0.142
1530	345.	0.640	0.010	0.081	0.088	0.002	******
1545	360.	0.633	0.013	0.077	0.085	0.002	0.142

EC -320
PROPENE + PAN
1978 OCT 19

CLOCK TIME	ELAPSED T(MIN)	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	PROX PPM	ME-N PPM	C2-N PPM C-600	C3-N-2 PPM PANALYZR	C4-N-2 PPM C-600	METHANE PPM	ETHANE PPM
840	-65.	******	C.001	0.0003	0.0004	0.0000	0.0001	0.0013	******	0.0009	******	0.0008	1.48	0.0060
900	-45.	******	******	******	******	******	******	******	0.0	******	0.0	******	******	******
920	-25.	******	0.002	0.0001	0.0007	******	******	0.0003	******	0.0023	******	0.0026	1.47	0.0078
945	0.	******	0.011	******	0.0005	******	******	******	0.0077	0.0022	0.0003	0.0016	1.47	0.0078
1000	15.	0.067	******	******	******	******	******	******	0.0077	******	0.0003	******	******	******
1015	30.	******	C.104	0.0008	0.0023	******	0.0001	******	0.0078	0.0023	0.0003	0.0023	******	******
1030	45.	******	******	******	******	******	******	******	0.0079	******	0.0005	******	******	******
1045	60.	0.168	C.158	0.0014	0.0044	******	0.0002	******	0.0079	******	0.0005	******	******	******
1100	75.	******	******	******	******	******	******	******	0.0078	******	0.0005	******	******	******
1115	90.	******	C.181	******	0.0038	******	C.0003	******	0.0078	******	0.0005	******	******	******
1130	105.	******	******	******	******	******	******	******	0.0078	******	0.0004	******	******	******
1145	120.	0.268	0.213	0.0025	0.0074	******	0.0004	0.0004	0.0079	******	0.0005	******	******	******
1200	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	******	0.228	0.0034	0.0119	******	0.0006	0.0013	0.0079	******	0.0005	******	******	******
1230	165.	******	******	******	******	******	******	******	0.0079	******	0.0005	******	******	******
1245	180.	0.266	0.202	0.0028	0.0054	******	0.0006	******	0.0079	******	0.0007	******	1.47	0.0060
1300	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	******	C.187	0.0034	0.0148	******	0.0008	0.0014	******	******	******	******	******	******
1330	225.	******	******	******	******	******	******	******	0.0084	******	0.0005	******	******	******
1345	240.	0.241	0.142	0.0026	0.0064	******	0.0007	******	0.0082	******	0.0005	******	******	******
1400	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	******	C.137	0.0029	0.0136	******	0.0008	0.0013	0.0080	******	0.0005	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.199	C.104	******	0.0063	******	0.0008	******	0.0078	0.0015	0.0007	0.0014	******	******
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	******	0.104	0.0037	0.0158	******	0.0008	0.0017	0.0080	0.0014	0.0005	0.0022	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	0.172	0.077	0.0057	0.0085	******	0.0006	0.0012	0.0078	0.0011	0.0005	0.0015	1.47	0.0078

EC -320
PROPENE + PAN
1978 OCT 19

CLOCK TIME	ELAPSED T(MIN)	ETHENE PPM	ACETYLEN PPM	ACETYLEN PPM	PROPANE PPM	I-C4 PPM
840	-65.	0.0031	0.0045	0.0044	0.0010	0.0001
900	-45.	******	******	******	******	******
920	-25.	0.0030	0.0044	******	******	******
945	0.	0.0031	0.0043	******	******	******
1000	15.	******	******	******	******	******
1015	30.	******	******	******	******	******
1030	45.	******	******	******	******	******
1045	60.	******	******	******	******	******
1100	75.	******	******	******	******	******
1115	90.	******	******	******	******	******
1130	105.	******	******	******	******	******
1145	120.	******	******	******	******	******
1200	135.	******	******	******	******	******
1215	150.	******	******	******	******	******
1230	165.	******	******	******	******	******
1245	180.	0.0024	0.0041	******	******	******
1300	195.	******	******	******	******	******
1315	210.	******	******	******	******	******
1330	225.	******	******	******	******	******
1345	240.	******	******	******	******	******
1400	255.	******	******	******	******	******
1415	270.	******	******	******	******	******
1430	285.	******	******	******	******	******
1445	300.	******	******	******	******	******
1500	315.	******	******	******	******	******
1515	330.	******	******	******	******	******
1530	345.	******	******	******	******	******
1545	360.	0.0017	0.0041	******	******	******

EC -320
PROPENE + PAN
1978 OCT 19

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
840	-65.	******	******	******	******	******
900	-45.	******	******	******	******	******
920	-25.	******	******	******	******	******
945	0.	84.0	47.5	18.67	0.251	******
1000	15.	84.0	52.0	******	0.266	15.00
1015	30.	87.0	57.0	******	0.264	******
1030	45.	86.5	60.0	******	0.259	******
1045	60.	86.7	62.0	18.52	0.259	20.00
1100	75.	87.0	64.0	******	******	******
1115	90.	86.5	66.0	******	******	******
1130	105.	87.0	67.0	******	******	******
1145	120.	86.5	67.0	18.82	******	20.00
1200	135.	86.5	67.5	******	******	******
1215	150.	86.2	67.5	******	******	******
1230	165.	86.5	67.5	******	******	******
1245	180.	86.7	67.5	18.66	0.261	20.00
1300	195.	86.2	67.5	******	0.257	******
1315	210.	86.7	67.5	******	0.259	******
1330	225.	87.0	68.0	******	0.256	******
1345	240.	87.7	67.5	18.92	0.259	20.00
1400	255.	88.4	67.5	******	0.256	******
1415	270.	87.9	67.5	******	0.261	******
1430	285.	86.4	67.5	******	0.259	******
1445	300.	86.2	68.0	18.83	0.256	20.00
1500	315.	87.7	69.0	******	0.264	******
1515	330.	88.7	68.0	******	0.261	******
1530	345.	86.2	68.5	******	0.261	******
1545	360.	85.5	70.0	18.91	0.264	20.00

EC -327
TOLUENE
1978 NOV 2

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
TENAX GC SAMPLES COLLECTED, BUT NO RELIABLE DATA OBTAINED
TENAX VOLUME ESTIMATED AT 40 LITERS TOTAL
BRADY 1193X, DASIBI 1212 (560 ML/MIN), TECO 148-1 (580 ML/MIN) USED

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.4
SSPOWER	KW	AVERAGE	15.16
RADIOM	MW/CM2	AVERAGE	C.192
NO	PPM	INIT COND	0.357
NO2-CORR	PPM	INIT COND	0.096
TOLUENE	PPM	INIT COND	C.573
HCHO	PPM	INIT COND	0.013
ACETALD	PPM	INIT COND	C.002
METHANE	PPM	INIT COND	1.364
ETHANE	PPM	INIT COND	0.006
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.003
PROPANE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.377
430.	1.955
403.	1.722
380.	1.484
370.	1.354
360.	1.147
350.	1.000
340.	0.783
330.	0.429
320.	0.277
310.	0.104
300.	0.006
290.	0.0

K1=0.40 MIN-1

SAMPLING RATE = 1.603 L/MIN

28 GC SAMPLES TAKEN

EC -327
TOLUENE
1978 NOV 2

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM
825	-o5.	******	******	******	******	0.000
915	-15.	0.000	0.351	0.C9o	0.445	0.572
930	0.	0.000	0.357	0.056	0.448	0.573
945	15.	0.000	0.335	0.108	0.443	******
1000	30.	0.000	0.304	0.136	0.439	0.540
1015	45.	0.000	C.270	0.164	0.430	******
1030	60.	0.005	C.228	0.195	0.421	0.511
1045	75.	0.007	C.188	0.219	0.406	******
1100	90.	0.017	0.145	0.242	0.385	0.462
1115	105.	0.029	0.117	0.251	0.367	******
1130	120.	0.039	C.094	0.256	0.349	0.439
1145	135.	0.056	C.071	0.256	0.327	******
1200	150.	0.073	C.057	0.249	0.302	0.407
1215	165.	0.093	C.046	0.238	0.281	******
1230	180.	0.115	0.044	0.224	0.265	0.383
1245	195.	0.132	0.034	0.204	0.237	******
1300	210.	0.156	0.028	0.190	0.217	0.355
1315	225.	0.176	0.024	0.175	0.197	******
1330	240.	0.200	C.021	0.158	0.176	0.329
1345	255.	0.225	C.020	0.142	0.158	******
1400	270.	0.249	C.017	0.127	0.142	0.304
1415	285.	0.276	C.018	0.102	0.116	******
1430	300.	0.303	0.013	0.066	0.097	0.276
1445	315.	0.332	0.012	0.070	0.080	******
1500	330.	0.354	0.013	0.052	0.064	0.248
1515	345.	0.369	C.013	0.046	0.056	******
1530	360.	0.376	0.012	0.038	0.050	0.228

EC -327
TOLUENE
1978 NOV 2

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (GMS)
625	-65.	******	******	0.0008	******	0.0003	******	0.0001	******	1.36	0.0062	0.0027	0.0032	0.0028
915	-15.	******	******	0.0012	******	0.0003	******	******	******	******	******	******	******	******
930	0.	0.000	0.013	0.0016	0.0001	0.0005	0.0000	0.0000	0.0	1.36	0.0060	0.0026	0.0032	0.0030
945	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	0.000	******	0.0026	0.0001	0.0012	0.0001	0.0001	0.0	******	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	0.001	0.019	0.0031	******	0.0011	******	******	0.0002	******	******	******	******	******
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	0.004	******	0.0042	0.0004	0.0026	******	0.0000	0.0004	******	******	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	0.007	0.038	0.0045	******	0.0024	******	******	0.0006	******	******	******	******	******
1145	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1200	150.	0.011	******	0.0057	0.0010	0.0050	******	0.0000	0.0007	******	******	******	******	******
1215	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1230	180.	0.016	0.042	0.0058	******	0.0035	******	******	0.0006	1.35	0.0058	0.0020	0.0034	******
1245	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1300	210.	0.020	******	0.0071	0.0018	0.0076	******	******	0.0009	******	******	******	******	******
1315	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1330	240.	0.025	0.052	0.0066	******	0.0047	******	******	0.0007	******	******	******	******	******
1345	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1400	270.	0.023	******	0.0081	0.0027	0.0095	******	******	0.0007	******	******	******	******	******
1415	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1430	300.	0.033	0.051	0.0072	******	0.0057	******	******	0.0009	******	******	******	******	******
1445	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1500	330.	0.040	******	0.0085	0.0036	******	******	0.0001	0.0007	******	******	******	******	******
1515	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1530	360.	0.041	0.059	0.0076	0.0017	0.0066	******	******	0.0007	1.36	0.0065	0.0014	0.0051	******

EC -327
TOLUENE
1976 NOV 2

CLOCK TIME	ELAPSED T(MIN)	PROPANE PPM	PROPENE PPM	I-C4 PPM
825	-65.	0.0009	0.000	0.0000
915	-15.	******	******	******
930	0.	0.0009	0.000	0.0001
945	15.	******	******	******
1000	30.	******	******	******
1015	45.	******	******	******
1030	60.	******	******	******
1045	75.	******	******	******
1100	90.	******	******	******
1115	105.	******	******	******
1130	120.	******	******	******
1145	135.	******	******	******
1200	150.	******	******	******
1215	165.	******	******	******
1230	180.	******	******	******
1245	195.	******	******	******
1300	210.	******	******	******
1315	225.	******	******	******
1330	240.	******	******	******
1345	255.	******	******	******
1400	270.	******	******	******
1415	285.	******	******	******
1430	300.	******	******	******
1445	315.	******	******	******
1500	330.	******	******	******
1515	345.	******	******	******
1530	360.	******	******	******

EC -327
TOLUENE
1978 NOV 2

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	SSPOWER KW	RADICM MW/CM2	HCHO VOL L
825	-65.	******	******	******	******
915	-15.	83.8	******	******	******
930	0.	83.5	15.16	0.195	20.00
945	15.	85.5	******	0.188	******
1000	30.	86.0	******	0.186	******
1015	45.	86.7	******	0.186	******
1030	60.	86.2	14.76	0.186	20.00
1045	75.	87.0	******	0.193	******
1100	90.	87.7	******	0.188	******
1115	105.	87.0	******	0.188	******
1130	120.	87.0	15.30	0.193	20.00
1145	135.	87.2	******	0.195	******
1200	150.	87.0	******	******	******
1215	165.	86.2	******	******	******
1230	180.	86.0	15.33	0.195	20.00
1245	195.	86.2	******	******	******
1300	210.	86.0	******	******	******
1315	225.	85.7	******	******	******
1330	240.	86.0	15.06	0.190	20.00
1345	255.	86.2	******	0.193	******
1400	270.	86.5	******	******	******
1415	285.	86.2	******	******	******
1430	300.	86.2	15.02	0.188	20.00
1445	315.	86.5	******	0.193	******
1500	330.	86.7	******	0.195	******
1515	345.	86.7	******	0.195	******
1530	360.	87.0	15.50	0.193	20.00

EC -328
TOLUENE + N-BUTANE
1978 NOV 3

BEGIN IRRADIATION 0900; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
PURE AIR REFILL BAG OPEN DURING INJECTIONS
NO TENAX GC SAMPLES TAKEN
BRAUN 1193X, DASIBI 1212 (560 ML/MIN), TECO 148-1 (580 ML/MIN) USED

T=0 AT 900 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	65.54
SSPOWER	KW	AVERAGE	15.37
RADIOM	MW/CM2	AVERAGE	0.193
H2O	PPM	AVERAGE	2.775E 04
NO	PPM	INIT COND	0.349
NO2-CORR	PPM	INIT COND	0.100
TOLUENE	PPM	INIT COND	0.569
N-C4	PPM	INIT COND	2.038
HCHO	PPM	INIT COND	0.015
ACETONE	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.134
ETHANE	PPM	INIT COND	0.007
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.004

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.099
430.	1.853
403.	1.640
380.	1.494
370.	1.335
360.	1.141
350.	1.000
340.	0.785
330.	0.531
320.	0.263
310.	0.094
300.	0.005
290.	0.0

K1=0.40 MIN-1

SAMPLING RATE = 1.501 L/MIN

40 GC SAMPLES TAKEN

EC -328
TOLUENE + N-BUTANE
1978 NOV 3

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	N-C4 PPM
750	-70.	******	******	******	******	0.000	******
837	-23.	******	******	******	******	0.367	2.026
900	0.	0.000	0.349	0.100	0.449	0.569	2.038
915	15.	0.000	0.302	0.141	0.440	******	******
930	30.	0.002	0.237	0.195	0.429	0.528	1.978
945	45.	0.012	0.177	0.244	0.419	******	******
1000	60.	0.024	0.132	0.277	0.407	0.510	1.929
1015	75.	0.044	0.098	0.292	0.386	******	******
1030	90.	0.066	0.074	0.295	0.368	0.489	1.880
1045	105.	0.095	0.056	0.298	0.349	******	******
1100	120.	0.120	0.046	0.286	0.330	0.471	1.832
1115	135.	0.149	0.038	0.272	0.306	******	******
1130	150.	0.183	0.033	0.257	0.289	0.449	1.800
1145	165.	0.213	0.029	0.242	0.268	******	******
1200	180.	0.242	0.026	0.228	0.250	0.432	1.759
1215	195.	0.274	0.022	0.209	0.230	******	******
1230	210.	0.305	0.021	0.194	0.211	0.413	1.719
1245	225.	0.340	0.018	0.170	0.185	******	******
1300	240.	0.369	0.017	0.150	0.165	0.396	1.686
1315	255.	0.401	0.015	0.125	0.145	******	******
1330	270.	0.430	0.015	0.104	0.127	0.378	1.639
1345	285.	0.459	0.018	0.094	0.109	******	******
1400	300.	0.484	0.015	0.083	0.094	0.362	1.613
1415	315.	0.501	0.015	0.069	0.080	******	******
1430	330.	0.515	0.012	0.059	0.070	0.349	1.584
1445	345.	0.520	0.012	0.051	0.061	******	******
1500	360.	0.523	0.013	0.048	0.059	0.333	1.540

EC -328
TOLUENE + N-BUTANE
1976 NOV 3

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM	L4-N-2 PPM PANALYZR	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (PN)
750	-70.	******	******	0.001	0.0001	0.0003	0.0	0.000	******	******	1.14	0.0065	0.0029	0.0035
837	-23.	******	******	******	0.0000	0.0006	******	******	******	******	******	******	******	******
900	0.	0.000	0.015	******	******	0.0007	0.0001	0.000	0.0	0.0	1.13	0.0065	0.0030	0.0036
915	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
930	30.	0.001	******	0.017	0.0001	0.0011	0.0004	0.010	0.0	0.0017	******	******	******	******
945	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1000	60.	0.004	0.069	0.036	0.0003	0.0020	0.0009	0.024	0.0001	0.0032	******	******	******	******
1015	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1030	90.	0.010	******	0.048	0.0005	0.0028	0.0011	0.047	0.0001	0.0059	******	******	******	******
1045	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1100	120.	0.016	0.052	0.067	0.0011	0.0039	******	0.046	0.0002	0.0071	******	******	******	******
1115	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	150.	0.024	******	0.075	0.0021	0.0069	0.0029	0.061	0.0003	0.0091	******	******	******	******
1145	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1200	180.	0.030	0.063	0.085	0.0019	0.0076	******	0.066	0.0003	0.0099	1.13	0.0065	0.0024	0.0040
1215	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1230	210.	0.037	******	0.099	0.0035	0.0111	0.0039	0.081	0.0002	0.0109	******	******	******	******
1245	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1300	240.	0.047	0.088	0.104	0.0038	0.0128	0.0038	0.088	0.0004	0.0127	******	******	******	******
1315	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1330	270.	0.056	******	0.104	0.0032	0.0128	******	0.091	0.0003	0.0130	******	******	******	******
1345	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1400	300.	0.063	0.069	0.106	0.0047	0.0156	0.0029	0.098	0.0004	0.0142	******	******	******	******
1415	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1430	330.	0.071	******	0.114	0.0046	0.0152	******	0.114	0.0004	0.0147	******	******	******	******
1445	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1500	360.	0.074	0.086	0.117	0.0048	0.0152	0.0020	0.105	0.0004	0.0157	1.15	0.0065	0.0021	0.0049

EC -328
TOLUENE + N-BUTANE
1976 NOV 3

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
750	-70.	******	******	******	******	******
837	-23.	******	******	******	******	******
900	0.	85.5	58.5	15.05	0.193	20.00
915	15.	86.2	61.0	******	0.195	******
930	30.	86.2	63.5	******	0.193	******
945	45.	85.2	65.5	******	0.186	******
1000	60.	85.5	66.5	15.06	0.186	20.00
1015	75.	85.7	67.0	******	0.190	******
1030	90.	86.2	67.5	******	0.188	******
1045	105.	86.5	67.5	******	0.188	******
1100	120.	87.0	67.5	15.23	0.193	20.00
1115	135.	87.4	67.5	******	0.188	******
1130	150.	87.2	67.5	******	0.188	******
1145	165.	87.4	67.0	******	0.188	******
1200	180.	87.7	67.0	15.31	0.193	20.00
1215	195.	87.9	67.0	******	0.190	******
1230	210.	87.7	67.0	******	0.188	******
1245	225.	87.9	67.0	******	0.188	******
1300	240.	87.0	67.5	15.62	0.195	20.00
1315	255.	87.2	68.0	******	0.198	******
1330	270.	87.0	68.0	******	******	******
1345	285.	87.0	68.5	******	******	******
1400	300.	87.0	68.5	15.75	0.205	20.00
1415	315.	86.5	68.5	******	0.193	******
1430	330.	86.5	68.5	******	0.195	******
1445	345.	86.5	68.5	******	0.193	******
1500	360.	86.7	69.0	15.54	0.195	20.00

EC -329
TOLUENE + PROPENE
1978 NOV 6

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
SIX 100 ML SAMPLES TAKEN FOR RESEARCH AND DEVELOPMENT
BRADY 1193X, DASIBI 1212 (560 ML/MIN),TECO 148-1,(580 ML/MIN)

T=0 AT 945 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	65.83
SSPOWER	KW	AVERAGE	15.43
RADIOM	MW/CM2	AVERAGE	0.189
H2O	PPM	AVERAGE	2.777E 04
NO	PPM	INIT COND	0.352
NO2-CORR	PPM	INIT COND	0.102
TOLUENE	PPM	INIT COND	0.555
PROPENE	PPM	INIT COND	0.098
HCHO	PPM	INIT COND	0.007
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.208
ETHANE	PPM	INIT COND	0.006
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.003

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.067
430.	1.859
403.	1.683
380.	1.498
370.	1.345
360.	1.137
350.	1.000
340.	0.796
330.	0.536
320.	0.283
310.	0.096
300.	0.003
290.	0.0

K1=0.40 MIN-1

SAMPLING RATE = 1.510 L/MIN

53 GC SAMPLES TAKEN

EC -329
TOLUENE + PROPENE
1978 NOV 6

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	PROPENE PPM
818	-87.	******	******	******	******	0.000	0.0002
926	-17.	******	******	******	******	0.560	0.0966
945	0.	0.000	0.352	0.102	0.455	0.555	0.0985
1000	15.	0.000	0.322	0.126	0.448	******	******
1015	30.	0.000	0.265	0.171	0.436	0.526	0.0800
1030	45.	0.002	0.214	0.213	0.427	******	******
1045	60.	0.012	0.161	0.250	0.411	0.490	0.0555
1100	75.	0.027	0.120	0.270	0.390	******	******
1115	90.	0.044	0.089	0.279	0.368	0.460	0.0415
1130	105.	0.068	0.070	0.279	0.349	******	******
1145	120.	0.088	0.056	0.267	0.322	0.420	0.0310
1200	135.	0.120	0.044	0.252	0.297	******	******
1215	150.	0.142	0.040	0.243	0.283	0.409	0.0221
1230	165.	0.171	0.031	0.216	0.246	******	******
1245	180.	0.198	0.026	0.195	0.220	0.389	0.0150
1300	195.	0.232	0.023	0.172	0.195	******	******
1315	210.	0.261	0.024	0.151	0.175	0.356	0.0105
1330	225.	0.291	0.020	0.129	0.249	******	******
1345	240.	0.322	0.017	0.108	0.125	0.313	0.0062
1400	255.	0.349	0.017	0.086	0.103	******	******
1415	270.	0.376	0.015	0.071	0.086	0.291	0.0035
1430	285.	0.393	0.013	0.054	0.066	******	******
1445	300.	0.403	0.013	0.052	0.065	******	0.0021
1500	315.	0.403	0.013	0.044	0.056	******	******
1515	330.	0.398	0.013	0.043	0.056	0.258	0.0014
1530	345.	0.391	0.013	0.039	0.053	******	******
1545	360.	0.384	0.012	0.038	0.050	0.246	0.0010

EC -329
TOLUENE + PROPENE
1978 NOV 6

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)
818	-87.	******	******	0.0014	0.0002	0.0005	0.0001	0.0001	******	1.20	0.0062	0.0029	0.0031	0.0025
928	-17.	******	******	0.0017	0.0001	0.0009	0.0001	0.0001	******	******	******	******	******	******
945	0.	0.000	0.007	0.0020	0.0002	0.0009	0.0001	0.0001	0.0	1.21	0.0059	0.0026	0.0027	******
1000	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	0.001	******	0.0151	0.0002	0.0014	0.0001	0.0001	0.0	******	******	******	******	******
1030	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.004	0.043	0.0279	0.0002	0.0021	0.0002	0.0001	0.0	******	******	******	******	******
1100	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	90.	0.010	******	0.0373	0.0005	0.0036	0.0003	0.0001	0.0004	******	******	******	******	******
1130	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	0.016	0.072	0.0367	0.0003	0.0048	******	0.0001	0.0005	******	******	******	******	******
1200	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	0.026	******	0.0420	******	0.0059	******	******	0.0006	******	******	******	******	******
1230	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	0.033	0.068	0.0407	0.0015	0.0087	******	0.0001	0.0005	1.20	0.0062	0.0021	0.0032	******
1300	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	0.042	******	0.0404	0.0021	0.0116	******	0.0001	0.0006	******	******	******	******	******
1330	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	0.051	0.086	0.0300	******	0.0093	******	******	0.0006	******	******	******	******	******
1400	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	0.061	******	0.0306	0.0022	0.0114	******	0.0001	0.0007	******	******	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.067	0.086	******	******	******	******	******	0.0007	******	******	******	******	******
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	0.064	******	0.0265	0.0031	0.0132	******	******	0.0005	******	******	******	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	0.064	0.067	0.0254	0.0036	0.0156	******	******	0.0007	1.20	0.0059	0.0014	0.0041	******

EC -329
TOLUENE + PROPENE
1978 NOV 6

CLOCK TIME	ELAPSED T(MIN)	PROPANE PPM	I-C4 PPM
816	-67.	0.0010	0.0001
928	-17.	******	******
945	0.	******	******
1000	15.	******	******
1015	30.	******	******
1030	45.	******	******
1045	60.	******	******
1100	75.	******	******
1115	90.	******	******
1130	105.	******	******
1145	120.	******	******
1200	135.	******	******
1215	150.	******	******
1230	165.	******	******
1245	180.	******	******
1300	195.	******	******
1315	210.	******	******
1330	225.	******	******
1345	240.	******	******
1400	255.	******	******
1415	270.	******	******
1430	285.	******	******
1445	300.	******	******
1500	315.	******	******
1515	330.	******	******
1530	345.	******	******
1545	360.	******	******

EC -325
TOLUENE + PROPENE
1978 NOV 6

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
810	-87.	******	******	******	******	******
920	-17.	******	******	******	******	******
945	0.	85.5	58.5	14.85	0.141	20.00
1000	15.	86.2	61.0	******	0.188	******
1015	30.	86.0	63.5	******	0.193	******
1030	45.	85.7	65.5	******	0.188	******
1045	60.	84.5	67.0	15.38	0.190	20.00
1100	75.	85.0	67.5	******	******	******
1115	90.	85.5	68.0	******	******	******
1130	105.	86.0	68.5	******	******	******
1145	120.	86.2	68.5	15.58	0.198	20.00
1200	135.	86.5	68.5	******	******	******
1215	150.	87.0	68.5	******	******	******
1230	165.	87.0	68.0	******	******	******
1245	180.	87.0	68.0	15.46	0.193	20.00
1300	195.	87.0	68.0	******	0.193	******
1315	210.	87.0	68.0	******	0.190	******
1330	225.	87.0	68.0	******	******	******
1345	240.	86.7	68.0	15.37	0.193	20.00
1400	255.	86.5	68.0	******	0.188	******
1415	270.	87.0	68.0	******	0.188	******
1430	285.	87.0	68.0	******	******	******
1445	300.	87.0	68.0	15.77	0.198	20.00
1500	315.	86.7	68.0	******	******	******
1515	330.	86.7	68.0	******	******	******
1530	345.	87.0	68.0	******	******	******
1545	360.	87.0	68.0	15.60	0.190	20.00

EC -330
TOLUENE + PROPENE
1978 NOV 7

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
LESS THAN 0.5 PPB METHYL NITRATE AT T=6
10-LITER TENAX GC SAMPLES TAKEN FOR RESEARCH AND DEVELOPMENT
AT APPROX 1100 AND 1200 (2 SAMPLES TOTAL)
BRADY 1193X,DASIBI 1212 (560 ML/MIN), TECO 146-1 (580 ML/MIN) USED

T=0 AT 945 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	302.9
REL HUM	%	AVERAGE	63.58
SSPOWER	KW	AVERAGE	15.39
RADIOM	MW/CM2	AVERAGE	0.193
H2O	PPM	AVERAGE	2.624E 04
NO	PPM	INIT COND	0.202
NO2-CORR	PPM	INIT COND	0.090
TOLUENE	PPM	INIT COND	0.567
PROPENE	PPM	INIT COND	0.694
HCHO	PPM	INIT COND	0.009
ACETALD	PPM	INIT COND	0.002
ETHANE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.154
430.	1.849
403.	1.731
380.	1.488
370.	1.343
360.	1.146
350.	1.000
340.	0.780
330.	0.537
320.	0.289
310.	0.091
300.	0.003
290.	0.0

K1=0.40 MIN-1

SAMPLING RATE = 1.591 L/MIN

46 GC SAMPLES TAKEN

EC -330
TOLUENE + PROPENE
1978 NOV 7

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	PROPENE PPM
835	-70.	******	******	******	******	0.000	0.0002
930	-15.	0.000	0.199	0.091	0.291	0.566	0.0955
945	0.	0.000	0.202	0.090	0.290	0.567	0.0942
1000	15.	0.005	0.160	0.123	0.283	******	******
1015	30.	0.020	0.103	0.169	0.269	0.526	0.0736
1030	45.	0.046	0.065	0.190	0.254	******	******
1045	60.	0.063	0.044	0.193	0.233	0.485	0.0464
1100	75.	0.122	0.035	0.175	0.207	******	******
1115	90.	0.166	0.024	0.153	0.175	0.447	0.0314
1130	105.	0.205	0.020	0.132	0.149	******	******
1145	120.	0.244	0.018	0.105	0.122	0.415	0.0201
1200	135.	0.281	0.016	0.085	0.097	******	******
1215	150.	0.320	0.013	0.064	0.075	0.374	0.0118
1230	165.	0.337	0.012	0.049	0.060	******	******
1245	180.	0.344	0.012	0.041	0.051	0.349	0.0073
1300	195.	0.342	0.013	0.033	0.046	******	******
1315	210.	0.335	0.012	0.032	0.042	0.333	0.0050
1330	225.	0.330	0.012	0.035	0.043	******	******
1345	240.	0.322	0.011	0.036	0.044	0.317	0.0035
1400	255.	0.315	0.012	0.037	0.046	******	******
1415	270.	0.308	0.012	0.036	0.046	0.304	0.0025
1430	285.	0.303	0.012	0.036	0.046	******	******
1445	300.	0.298	0.016	0.029	0.042	0.291	0.0019
1500	315.	0.293	0.012	0.032	0.042	******	******
1515	330.	0.286	0.012	0.033	0.043	0.272	0.0014
1530	345.	0.283	0.012	0.034	0.044	******	******
1545	360.	0.278	0.012	0.034	0.044	0.260	0.0010

EC -330
TOLUENE & PROPENE
1978 NOV 7

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPENE PPM	1-C4 PPM
835	-70.	******	******	0.0012	0.0002	0.0003	******	1.14	0.0054	0.0023	0.0022	0.0020	0.0011	0.0001
930	-15.	******	******	0.0015	0.0001	0.0007	0.0000	******	******	******	******	******	******	******
945	0.	0.000	0.009	0.0019	0.0001	0.0004	0.0001	******	0.0054	0.0023	0.0020	******	******	******
1000	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	0.003	******	0.0197	0.0001	0.0016	0.0001	******	******	******	******	******	******	******
1030	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.007	0.058	0.0330	0.0005	0.0038	0.0000	******	******	******	******	******	******	******
1100	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	90.	0.022	******	0.0405	0.0013	0.0072	0.0000	******	******	******	******	******	******	******
1130	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	0.034	0.084	0.0379	******	0.0054	******	******	******	******	******	******	******	******
1200	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	0.048	******	0.0359	0.0024	0.0117	******	******	******	******	******	******	******	******
1230	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	******	0.098	0.0338	0.0026	0.0080	******	1.14	0.0057	0.0015	0.0026	******	******	******
1300	195.	0.057	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	0.058	******	0.0391	0.0037	0.0160	******	******	******	******	******	******	******	******
1330	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	0.053	0.093	0.0356	0.0034	0.0128	******	******	******	******	******	******	******	******
1400	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	270.	0.051	******	0.0300	0.0026	0.0078	******	******	******	******	******	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.053	0.089	0.0302	0.0030	0.0069	******	******	******	******	******	******	******	******
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	0.051	******	0.0260	0.0028	0.0101	******	******	******	******	******	******	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	0.049	0.089	0.0270	0.0025	0.0110	0.0001	1.14	0.0055	0.0014	0.0039	******	******	******

EC -330
TOLUENE + PROPENE
1978 NOV 7

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L
835	-70.	******	******	******	******	******
930	-15.	84.0	54.0	******	******	******
945	0.	84.8	52.5	15.13	0.193	20.00
1000	15.	85.5	55.0	******	0.186	******
1015	30.	85.5	59.0	******	0.195	******
1030	45.	84.5	63.0	******	0.190	******
1045	60.	84.8	66.5	15.26	0.193	20.00
1100	75.	85.0	67.0	******	******	******
1115	90.	86.0	67.0	******	******	******
1130	105.	86.0	67.5	******	******	******
1145	120.	86.2	67.5	15.30	0.195	20.00
1200	135.	86.2	67.5	******	******	******
1215	150.	86.5	67.0	******	******	******
1230	165.	86.5	67.0	******	******	******
1245	180.	86.7	67.0	15.25	******	20.00
1300	195.	87.0	67.0	15.33	0.193	******
1315	210.	87.0	67.0	******	0.186	******
1330	225.	85.7	67.5	******	0.186	******
1345	240.	85.7	68.0	15.54	0.195	20.00
1400	255.	85.7	68.0	******	0.193	******
1415	270.	86.2	68.0	******	0.198	******
1430	285.	85.7	68.0	******	0.190	******
1445	300.	86.0	68.0	15.54	0.195	20.00
1500	315.	86.0	68.0	******	******	******
1515	330.	86.0	68.0	******	0.198	******
1530	345.	86.0	68.0	******	0.198	******
1545	360.	86.0	68.0	15.79	******	20.00

EC -331
TOLUENE + N-BUTANE
1978 NOV 6

BEGIN IRRADIATION 0915; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
TENAX GC SAMPLES COLLECTED, BUT NO RELIABLE DATA OBTAINED
C-600 OXYGENATE DATA FOR 1145,1245,1345&1445 REJECTED DUE TO
ABNORMAL PEAK SHAPES
BRADY 1193X, DASIBI 1211 (560 ML/MIN), TECO 148-1 (580 ML/MIN)

T=0 AT 915 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	65.36
SSPOWER	KW	AVERAGE	15.55
RADIOM	MW/CM2	AVERAGE	0.191
H2O	PPM	AVERAGE	2.655E 04
NO	PPM	INIT COND	0.354
NO2-CORR	PPM	INIT COND	0.112
TOLUENE	PPM	INIT COND	1.991
N-C4	PPM	INIT COND	2.043
HCHO	PPM	INIT COND	0.006
METHANE	PPM	INIT COND	1.158
ETHANE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

500.	2.138
430.	1.872
403.	1.681
380.	1.468
370.	1.333
360.	1.141
350.	1.000
340.	0.794
330.	0.533
320.	0.285
310.	0.094
300.	0.0

K1=0.40 MIN-1

SAMPLING RATE = 1.619 L/MIN

51 GC SAMPLES TAKEN

EC -331
TOLUENE + N-BUTANE
1978 NOV 8

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM	N-C4 PPM
815	-60.	******	******	******	******	0.000	******
905	-10.	0.0	0.351	0.112	0.464	1.960	2.019
915	0.	0.000	0.354	0.112	0.465	1.991	2.043
930	15.	0.000	0.281	0.174	0.453	******	******
945	30.	0.022	0.156	0.276	0.432	1.880	1.970
1000	45.	0.095	0.054	0.334	0.366	******	******
1015	60.	0.203	0.029	0.299	0.325	1.752	1.902
1030	75.	0.313	0.020	0.234	0.250	******	******
1045	90.	0.418	0.015	0.160	0.176	1.621	1.853
1100	105.	0.496	0.012	0.112	0.121	******	******
1115	120.	0.523	0.012	0.077	0.088	1.527	1.795
1130	135.	0.518	0.012	0.065	0.074	******	******
1145	150.	0.511	0.011	0.057	0.067	1.507	1.756
1200	165.	0.496	0.012	0.058	0.067	******	******
1215	180.	0.481	0.015	0.053	0.065	1.463	1.737
1230	195.	0.467	0.011	0.053	0.063	******	******
1245	210.	0.449	0.013	0.051	0.062	1.459	1.707
1300	225.	0.437	0.011	0.052	0.060	******	******
1315	240.	0.427	0.011	0.054	0.064	1.425	1.693
1330	255.	0.413	0.012	0.055	0.065	******	******
1345	270.	0.406	0.012	0.055	0.065	1.356	1.604
1400	285.	0.393	0.012	0.054	0.063	******	******
1415	300.	0.384	0.011	0.053	0.062	1.359	1.642
1430	315.	0.374	0.012	0.052	0.060	******	******
1445	330.	0.364	0.012	0.052	0.061	1.354	1.622
1500	345.	0.359	0.012	0.050	0.060	******	******
1515	360.	0.352	0.012	0.050	0.060	1.298	1.613

EC -331
TOLUENE + N-BUTANE
1978 NOV 8

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM	C4-N-2 PPM PANALYZR	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (PN)
815	-60.	******	******	0.0011	0.0001	0.0004	0.0001	0.0000	******	******	1.16	0.0054	0.0021	0.0017
905	-10.	******	******	******	******	0.0005	******	******	******	******	******	******	******	******
915	0.	0.000	0.006	******	******	0.0002	******	0.0000	0.0	0.0	1.16	0.0055	0.0020	0.0017
930	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
945	30.	0.004	******	0.0199	0.0003	0.0022	0.0005	0.0158	0.0	0.0020	******	******	******	******
1000	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	60.	0.023	0.035	0.0436	0.0016	0.0095	0.0022	0.0370	0.0001	0.0041	******	******	******	******
1030	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	90.	0.051	******	0.0625	0.0031	0.0156	0.0035	0.0537	0.0002	0.0052	******	******	******	******
1100	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	120.	0.069	0.048	0.0780	0.0045	0.0204	0.0041	0.0672	0.0002	0.0052	******	******	******	******
1130	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	150.	0.076	******	******	******	******	******	******	******	0.0046	******	******	******	******
1200	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	180.	0.074	0.068	0.0757	0.0034	0.0171	0.0045	0.0788	0.0002	0.0070	1.14	0.0055	0.0026	0.0033
1230	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	210.	0.074	******	******	******	******	******	******	0.0002	0.0063	******	******	******	******
1300	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	240.	0.071	0.084	0.0675	0.0039	0.0178	0.0054	0.0905	0.0003	0.0052	******	******	******	******
1330	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	270.	0.067	******	******	******	******	******	******	0.0002	0.0046	******	******	******	******
1400	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	300.	0.067	0.109	0.0925	0.0033	0.0182	0.0048	0.0965	0.0003	0.0064	******	******	******	******
1430	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	330.	0.065	******	******	******	******	******	******	0.0003	0.0046	******	******	******	******
1500	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	360.	0.062	0.111	0.0668	0.0036	0.0154	******	0.0927	0.0003	0.0052	1.15	0.0055	0.0023	0.0054

EC -331
TOLUENE + N-BUTANE
1978 NOV 8

CLOCK TIME	ELAPSED T(MIN)	BENZENE PPM
815	-60.	0.0001
905	-10.	0.0012
915	0.	******
930	15.	******
945	30.	******
1000	45.	******
1015	60.	******
1030	75.	******
1045	90.	******
1100	105.	******
1115	120.	******
1130	135.	******
1145	150.	******
1200	165.	******
1215	180.	******
1230	195.	******
1245	210.	******
1300	225.	******
1315	240.	******
1330	255.	******
1345	270.	******
1400	285.	******
1415	300.	******
1430	315.	******
1445	330.	******
1500	345.	******
1515	360.	******

EC -331
TOLUENE + N-BUTANE
1978 NOV 8

CLOCK TIME	ELAPSEC T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	TENX VOL L
815	-60.	******	******	******	******	******	******
900	-10.	85.0	51.5	******	******	******	******
915	0.	84.5	51.0	15.33	0.193	20.00	******
930	15.	85.0	53.5	******	0.190	******	******
945	30.	85.2	58.5	******	0.188	******	******
1000	45.	84.5	62.5	******	******	******	******
1015	60.	85.0	65.5	15.25	0.188	20.00	******
1030	75.	86.0	66.0	******	******	******	******
1045	90.	85.5	66.5	******	******	******	******
1100	105.	85.7	66.5	******	******	******	******
1115	120.	85.5	66.5	15.46	0.188	20.00	10.00
1130	135.	86.2	66.5	******	******	******	******
1145	150.	86.2	66.5	******	******	******	******
1200	165.	86.5	66.5	******	******	******	******
1215	180.	86.2	66.5	15.50	0.190	20.00	******
1230	195.	86.0	66.5	******	0.190	******	******
1245	210.	85.2	67.0	15.41	0.195	******	10.00
1300	225.	85.7	67.0	******	0.195	******	******
1315	240.	86.2	67.5	15.99	0.188	20.00	******
1330	255.	86.0	67.5	******	0.193	******	******
1345	270.	86.0	67.5	******	0.188	******	10.00
1400	285.	86.0	67.5	******	0.188	******	******
1415	300.	86.2	67.5	15.76	0.193	20.00	******
1430	315.	86.2	67.5	******	******	******	******
1445	330.	86.5	67.5	******	******	******	******
1500	345.	86.2	67.5	******	0.193	******	******
1515	360.	85.5	67.5	15.72	0.193	20.00	******

EC -334
TOLUENE + PROPENE
1978 NOV 13

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
3' C-600 IS 3' 10% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP/1000 UNCERTAIN DUE TO UNSYMMETRICAL PEAK SHAPE
BENZALDEHYDE VALUES FOR 3' C-600 MORE UNCERTAIN DUE TO INTERFERENCE WITH
UNKNOWN BACKGROUND PEAK.
TOLUENE VALUES FROM 10' C-600 MORE RELIABLE THAN FROM 3' C-600
BECAUSE CALIBRATION IS BETTER CHARACTERIZED
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193X, DASIBI 1212 (565 ML/MIN), TECO 148-1 (540 ML/MIN) USED

T=0 AT 1015 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.5
REL HUM	%	AVERAGE	65.65
SSPOWER	KW	AVERAGE	15.31
RADIOM	MW/CM2	AVERAGE	0.182
H2O	PPM	AVERAGE	2.775E 04
NO	PPM	INIT COND	0.348
NO2-CORR	PPM	INIT COND	0.100
TOLUENE	PPM	INIT COND	0.993
PROPENE	PPM	INIT COND	0.095
HCHO	PPM	INIT COND	0.015
ACETALD	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.669
ETHANE	PPM	INIT COND	0.004
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.002

* ASSIGNED INITIAL CONDITION

EC -334
TOLUENE + PROPENE
1978 NOV 13

SPECTRAL DISTRIBUTION:	WAVELENGTH(NM)	REL. INTENSITY
	500.	2.575
	430.	2.027
	403.	1.792
	380.	1.549
	370.	1.380
	360.	1.164
	350.	1.000
	340.	0.784
	330.	0.517
	320.	0.272
	310.	0.086
	300.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.557 L/MIN

50 GC SAMPLES TAKEN

EC -334
TOLUENE + PROPENE
1976 NOV 13

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM 10°C-600	TOLUENE PPM 3° C-600	PROPENE PPM
825	-110.	******	******	******	******	0.000	******	0.0002
940	-35.	******	******	******	******	******	******	******
945	-30.	0.000	C.348	0.101	0.448	0.957	******	0.0949
1015	0.	0.000	C.348	C.100	0.448	0.993	1.140	0.0954
1030	15.	0.000	C.265	0.152	0.436	******	******	******
1045	30.	0.007	0.208	0.211	0.416	0.916	1.046	0.0725
1100	45.	0.022	C.129	0.260	0.387	******	******	******
1115	60.	0.061	0.073	0.289	0.361	0.654	0.595	0.0492
1130	75.	0.112	0.046	0.281	0.325	******	******	******
1145	90.	0.161	0.034	0.254	0.286	0.780	0.918	0.0543
1200	105.	0.210	C.026	0.218	0.241	******	******	******
1215	120.	0.264	0.020	0.175	0.195	0.731	0.918	0.0221
1220	125.	0.281	C.020	0.166	0.184	******	******	******
1230	135.	0.316	0.018	0.138	0.155	******	******	******
1245	150.	0.364	C.015	0.100	0.115	0.671	0.820	0.0129
1300	165.	0.398	0.015	0.081	0.094	******	******	******
1315	180.	0.408	C.013	0.065	0.076	0.620	******	0.0121
1325	190.	0.406	C.013	0.059	0.070	******	******	******
1330	195.	0.401	0.011	0.059	0.070	******	******	******
1345	210.	0.391	0.013	0.052	0.064	0.599	0.671	0.0055
1400	225.	0.381	0.012	C.050	0.061	******	******	******
1415	240.	0.374	0.012	0.050	0.060	0.576	0.669	0.0040
1430	255.	0.364	C.012	0.048	0.058	******	******	******
1437	262.	******	******	******	******	******	******	******
1445	270.	0.357	C.011	0.044	0.054	******	0.652	0.0029
1500	285.	0.349	C.011	0.044	0.053	******	******	******
1515	300.	0.342	0.011	0.039	0.049	******	0.628	0.0022
1530	315.	0.335	0.012	0.039	0.050	******	******	******
1545	330.	0.330	C.012	0.037	0.048	0.551	******	0.0018
1555	340.	0.325	C.011	0.037	0.046	******	******	******
1600	345.	0.322	0.012	0.037	0.047	******	******	******
1615	360.	0.315	0.011	0.035	0.045	******	0.608	0.0012

EC -334
TOLUENE + PROPENE
1976 NOV 13

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	ME-N PPM	BZALD PPM 3' C-600	BZALD PPM SP 1000	O-CRESOL PPM SP 1000	MNT PPM SP 1000	METHANE PPM	ETHANE PPM
825	-110.	******	******	0.0006	0.0001	0.0003	******	******	******	******	******	******		
940	-35.	******	******	******	******	******	******	******	0.0	******	******	******	1.67	0.0040
945	-30.	******	******	0.0012	******	0.0008	0.0001	******	******	******	******	******	******	******
1015	0.	0.000	0.015	0.0013	******	0.0005	0.0001	0.0	0.0	0.0	0.0	0.0	******	******
1030	15.	******	******	******	******	******	******	******	******	******	******	******	1.67	0.0040
1045	30.	0.001	******	0.0162	0.0001	0.0013	******	0.0	0.0045	******	******	******	******	******
1100	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	60.	0.011	0.053	0.0349	0.0008	0.0041	******	0.0001	0.0204	0.0149	0.0172	0.0034	******	******
1130	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	90.	0.025	******	0.0390	0.0013	******	******	******	******	******	******	******	******	******
1200	105.	******	******	******	******	******	******	0.0003	0.0286	******	******	******	******	******
1215	120.	0.041	0.086	0.0419	******	0.0134	******	******	******	******	******	******	******	******
1220	125.	******	******	******	******	******	******	0.0005	0.0375	******	******	******	******	******
1230	135.	******	******	******	******	******	******	******	******	0.0116	0.0034	0.0036	******	******
1245	150.	0.058	******	0.0459	0.0039	0.0163	******	******	******	******	******	******	******	******
1300	165.	******	******	******	******	******	******	******	0.0542	******	******	******	******	******
1315	180.	0.067	******	0.0373	******	0.0183	******	0.0006	******	******	******	******	******	******
1325	190.	******	******	******	******	******	******	******	******	0.0127	0.0026	0.0032	1.67	0.0044
1330	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	210.	0.071	******	0.0365	0.0034	0.0118	******	0.0003	0.0277	******	******	******	******	******
1400	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	240.	0.068	0.106	0.0354	0.0029	0.0109	******	0.0005	0.0277	******	******	******	******	******
1430	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1437	262.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	270.	0.065	******	******	******	******	******	******	******	0.0180	0.0043	0.0034	******	******
1500	285.	******	******	******	******	******	******	0.0006	0.0424	******	******	******	******	******
1515	300.	0.064	0.111	******	******	******	******	******	******	******	******	******	******	******
1530	315.	******	******	******	******	******	******	0.0004	0.0418	******	******	******	******	******
1545	330.	0.062	******	0.0354	******	0.0173	******	0.0006	******	******	******	******	******	******
1555	340.	******	******	******	******	******	******	******	******	******	******	******	******	******
1600	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1615	360.	0.058	0.113	******	******	******	******	0.0006	0.0393	******	******	******	1.67	0.0044

EC -334
TOLUENE + PROPENE
1978 NOV 13

CLOCK TIME	ELAPSED T(MIN)	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPANE PPM	I-C4 PPM	BENZENE PPM
0845	-210.	0.0019	0.0027	0.0025	0.0010	0.0001	0.0001
0940	-35.	******	******	******	******	******	******
0945	-30.	******	******	******	******	******	0.0007
1015	0.	0.0020	0.0025	******	******	******	******
1030	15.	******	******	******	******	******	******
1045	30.	******	******	******	******	******	******
1100	45.	******	******	******	******	******	******
1115	60.	******	******	******	******	******	******
1130	75.	******	******	******	******	******	******
1145	90.	******	******	******	******	******	******
1200	105.	******	******	******	******	******	******
1215	120.	******	******	******	******	******	******
1220	125.	******	******	******	******	******	******
1230	135.	******	******	******	******	******	******
1245	150.	******	******	******	******	******	******
1300	165.	******	******	******	******	******	******
1315	180.	0.0015	0.0035	******	******	******	******
1325	190.	******	******	******	******	******	******
1330	195.	******	******	******	******	******	******
1345	210.	******	******	******	******	******	******
1400	225.	******	******	******	******	******	******
1415	240.	******	******	******	******	******	******
1430	255.	******	******	******	******	******	******
1437	262.	******	******	******	******	******	******
1445	270.	******	******	******	******	******	******
1500	285.	******	******	******	******	******	******
1515	300.	******	******	******	******	******	******
1530	315.	******	******	******	******	******	******
1545	330.	******	******	******	******	******	******
1555	340.	******	******	******	******	******	******
1600	345.	******	******	******	******	******	******
1615	360.	0.0014	0.0055	******	******	******	******

EC -334
TOLUENE + PROPENE
1978 NOV 13

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	TENX VOL L
925	-110.	******	******	******	******	******	******
940	-35.	******	******	******	******	******	******
945	-30.	85.5	57.5	******	******	******	******
1015	0.	86.2	57.5	15.16	0.183	20.00	10.00
1030	15.	85.7	60.0	15.16	0.188	******	******
1045	30.	85.2	63.0	******	******	******	******
1100	45.	85.5	64.5	******	******	******	******
1115	60.	85.5	65.5	15.15	0.186	20.00	10.00
1130	75.	85.7	66.0	******	******	******	******
1145	90.	85.5	66.5	******	******	******	******
1200	105.	86.0	67.0	******	******	******	******
1215	120.	86.0	67.0	15.23	0.183	20.00	******
1220	125.	86.5	67.0	******	******	******	10.00
1230	135.	86.5	67.0	******	******	******	******
1245	150.	86.7	67.0	******	******	******	******
1300	165.	86.7	67.0	******	******	******	******
1315	180.	86.5	66.5	15.27	0.183	******	******
1325	190.	87.0	66.5	******	0.181	******	10.00
1330	195.	87.0	66.5	******	0.178	******	******
1345	210.	86.7	66.5	******	0.171	******	******
1400	225.	87.2	66.5	******	0.176	******	******
1415	240.	87.0	66.5	15.27	0.178	20.00	******
1430	255.	87.2	66.5	******	******	******	******
1437	262.	******	******	******	******	******	10.00
1445	270.	87.2	66.0	******	******	******	******
1500	285.	87.2	66.0	******	******	******	******
1515	300.	87.2	66.0	15.54	0.183	20.00	10.00
1530	315.	87.4	66.0	******	0.181	******	******
1545	330.	87.7	66.0	******	******	******	******
1555	340.	87.9	66.0	******	******	******	******
1600	345.	87.9	66.0	******	******	******	******
1615	360.	87.9	66.0	15.67	0.183	20.00	******

EC -335
TOLUENE + ACETALDEHYDE
1978 NOV 15

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-60C/C-22 COLUMN
10' C-600 IS 10' 10% C-60C/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
ACETALDEHYDE ADDED BY FLUSHING IN 0.2396 TORR IN A 5.467 LITER BULB.
CALCULATED INITIAL ACETALDEHYDE = .2965 PPM.
10' C-600 ACETALDEHYDE VALUES MAY BE 9% HIGH
1115: O-CRESOL PEAK OFF SCALE. CONCENTRATION PROBABLY GREATER THAN 15 PPB
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193X, DASIBI 1212 (565 ML/MIN), TECO 146-1 (540 ML/MIN) USED

T=0 AT 1015 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	60.0
SSPOWER	KW	AVERAGE	15.0
RADIOM	MW/CM2	AVERAGE	0.177
H2O	PPM	AVERAGE	2.4E+04
NO	PPM	INIT COND	0.352
NO2-CORR	PPM	INIT COND	0.052
TOLUENE	PPM	INIT COND	0.59*
ACETALD	PPM	INIT COND	0.326
HCHO	PPM	INIT COND	0.010
BZALD	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	1.231
ETHANE	PPM	INIT COND	0.004
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.002
PROPANE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -335
TOLUENE + ACETALDEHYDE
1978 NOV 15

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.530
430.	2.032
403.	1.796
380.	1.558
370.	1.391
360.	1.170
350.	1.000
340.	0.787
330.	0.520
320.	0.278
310.	0.090
300.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.606 L/MIN

42 GC SAMPLES TAKEN

EC -355
TOLUENE + ACETALDEHYDE
1976 NOV 15

CLOCK TIME	ELAPSED TIME(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM 10'C-600	TOLUENE PPM 5' C-600	ACETALD PPM
840	-95.	******	******	******	******	0.000	******	0.001
945	-30.	******	******	******	******	******	0.000	******
950	-25.	******	******	******	******	0.993	0.985	0.325
1015	0.	0.000	0.352	0.092	0.443	0.958	1.011	0.326
1030	15.	0.000	0.289	0.141	0.429	******	******	******
1045	30.	0.005	0.214	0.202	0.415	0.942	0.925	0.227
1100	45.	0.017	0.148	0.243	0.391	******	******	******
1115	60.	0.037	0.098	0.271	0.368	0.853	0.881	0.247
1130	75.	0.068	0.070	0.274	0.342	******	******	******
1145	90.	0.100	0.048	0.262	0.307	0.836	0.823	0.199
1200	105.	0.139	0.037	0.244	0.279	******	******	******
1215	120.	0.173	0.029	0.221	0.248	0.798	0.780	0.184
1230	135.	0.215	0.024	0.187	0.209	******	******	******
1245	150.	0.254	0.021	0.151	0.169	0.739	0.737	0.150
1300	165.	0.296	0.018	0.117	0.132	******	******	******
1315	180.	0.340	0.016	0.089	0.102	0.684	0.675	0.124
1330	195.	0.369	0.015	0.064	0.076	******	******	******
1345	210.	0.391	0.015	0.043	0.055	0.631	0.650	0.090
1400	225.	0.396	0.013	0.035	0.045	******	******	******
1415	240.	0.393	0.013	0.027	0.038	0.619	0.618	0.095
1430	255.	0.388	0.013	0.026	0.038	******	******	******
1445	270.	0.384	0.012	0.026	0.036	0.601	0.602	0.092
1500	285.	0.376	0.012	0.026	0.037	******	******	******
1515	300.	0.371	0.012	0.029	0.039	0.582	0.588	0.091
1530	315.	0.364	0.012	0.031	0.042	******	******	******
1545	330.	0.359	0.013	0.031	0.045	0.557	0.564	0.077
1600	345.	0.352	0.012	0.028	0.038	******	******	******
1615	360.	0.344	0.012	0.017	0.029	0.544	0.558	0.074

EC -335
TOLUENE + ACETALDEHYDE
1978 NOV 15

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	PROPALD PPM	ACETONE PPM	ME-N PPM	BZALD PPM SP C-600	BZALD PPM SP 1000	O-CRESOL PPM SP 1000	MNT PPM SP 1000	METHANE PPM	ETHANE PPM	ETHENE PPM
840	-95.	******	******	******	0.0002	******	******	******	******	******	1.26	0.0041	0.0019
945	-30.	******	******	******	******	******	0.0042	0.0009	0.0	0.0	******	******	******
950	-25.	******	******	******	******	******	0.0016	0.0007	0.0	0.0	******	******	******
1015	0.	0.000	0.010	******	******	0.0	0.0018	******	******	******	1.23	0.0041	0.0020
1030	15.	******	******	******	******	******	******	******	******	******	******	******	******
1045	30.	0.006	******	******	******	0.0001	0.0060	******	******	******	******	******	******
1100	45.	******	******	******	******	******	******	******	******	******	******	******	******
1115	60.	0.024	0.055	******	0.0026	0.0006	0.0059	0.0065	******	0.0011	******	******	******
1130	75.	******	******	******	******	******	******	******	******	******	******	******	******
1145	90.	0.042	******	******	0.0054	0.0008	0.0090	******	******	******	******	******	******
1200	105.	******	******	******	******	******	******	******	******	******	******	******	******
1215	120.	0.053	0.073	0.0008	0.0081	0.0010	0.0120	0.0095	0.0061	0.0017	******	******	******
1230	135.	******	******	******	******	******	******	******	******	******	******	******	******
1245	150.	0.079	******	0.0012	0.0118	0.0012	0.0125	******	******	******	******	******	******
1300	165.	******	******	******	******	******	******	******	******	******	******	******	******
1315	180.	0.096	0.092	0.0018	0.0126	0.0009	0.0112	0.0116	0.0022	0.0017	1.23	0.0037	0.0015
1330	195.	******	******	******	******	******	******	******	******	******	******	******	******
1345	210.	0.111	******	0.0041	0.0107	0.0012	0.0125	******	******	******	******	******	******
1400	225.	******	******	******	******	******	******	******	******	******	******	******	******
1415	240.	0.115	0.100	0.0018	0.0137	0.0011	0.0129	******	******	0.0021	******	******	******
1430	255.	******	******	******	******	******	******	******	******	******	******	******	******
1445	270.	0.111	******	0.0025	0.0136	0.0011	0.0136	******	******	******	******	******	******
1500	285.	******	******	******	******	******	******	******	******	******	******	******	******
1515	300.	0.102	0.105	0.0027	0.0144	0.0011	0.0142	0.0121	0.0073	0.0017	******	******	******
1530	315.	******	******	******	******	******	******	******	******	******	******	******	******
1545	330.	0.091	******	0.0024	0.0134	0.0011	0.0139	******	******	******	******	******	******
1600	345.	******	******	******	******	******	******	******	******	******	******	******	******
1615	360.	0.098	0.117	0.0026	0.0131	0.0011	0.0143	******	******	******	1.23	0.0038	0.0013

EC -335
TOLUENE + ACETALDEHYDE
1978 NOV 15

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM	N-C4 PPM
840	-95.	0.0023	0.0025	0.0010	0.0002	0.0001	******
945	-30.	******	******	******	******	******	******
950	-25.	******	******	******	******	******	******
1015	0.	0.0024	0.0024	0.0010	0.0002	0.0001	******
1030	15.	******	******	******	******	******	******
1045	30.	******	******	******	******	******	******
1100	45.	******	******	******	******	******	******
1115	60.	******	******	******	******	******	******
1130	75.	******	******	******	******	******	******
1145	90.	******	******	******	******	******	******
1200	105.	******	******	******	******	******	******
1215	120.	******	******	******	******	******	******
1230	135.	******	******	******	******	******	******
1245	150.	******	******	******	******	******	******
1300	165.	******	******	******	******	******	******
1315	180.	0.0027	0.0030	0.0009	0.0001	0.0001	0.0000
1330	195.	******	******	******	******	******	******
1345	210.	******	******	******	******	******	******
1400	225.	******	******	******	******	******	******
1415	240.	******	******	******	******	******	******
1430	255.	******	******	******	******	******	******
1445	270.	******	******	******	******	******	******
1500	285.	******	******	******	******	******	******
1515	300.	******	******	******	******	******	******
1530	315.	******	******	******	******	******	******
1545	330.	******	******	******	******	******	******
1600	345.	******	******	******	******	******	******
1615	360.	0.0042	0.0045	0.0008	0.0001	0.0001	0.0001

EC -335
TOLUENE + ACETALDEHYDE
1976 NOV 15

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	TENX VOL L
940	-95.	******	******	******	******	******	******
945	-30.	******	******	******	******	******	10.00
950	-25.	******	******	******	******	******	10.00
1015	0.	85.2	47.0	15.01	0.190	20.00	******
1030	15.	84.3	49.5	******	0.181	******	******
1045	30.	84.5	53.5	******	0.178	******	******
1100	45.	84.8	56.5	******	******	******	******
1115	60.	84.5	58.5	15.01	0.176	20.00	10.00
1130	75.	85.2	59.5	******	******	******	******
1145	90.	85.5	60.5	******	******	******	******
1200	105.	85.5	61.0	******	******	******	******
1215	120.	85.7	61.0	15.03	0.181	20.00	10.00
1230	135.	86.0	61.0	******	******	******	******
1245	150.	86.2	61.0	******	******	******	******
1300	165.	86.5	61.0	******	0.178	******	******
1315	180.	86.5	61.0	14.90	0.173	20.00	10.00
1330	195.	86.5	61.0	******	0.171	******	******
1345	210.	86.7	61.0	******	0.173	******	******
1400	225.	87.0	61.5	******	0.176	******	******
1415	240.	87.0	61.0	14.93	0.176	20.00	10.00
1430	255.	86.7	61.0	******	0.176	******	******
1445	270.	86.5	61.0	******	0.176	******	******
1500	285.	85.5	62.0	******	0.168	******	******
1515	300.	85.7	63.5	15.27	0.173	20.00	10.00
1530	315.	85.5	64.0	******	0.178	******	******
1545	330.	85.5	64.5	******	0.178	******	******
1600	345.	85.2	64.5	******	0.176	******	******
1615	360.	85.5	64.5	15.15	0.176	20.00	******

EC -336
TOLUENE + FORMALDEHYDE
1978 NOV 16

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER, TRICHROIC FILTER OUT
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
HCHO ADDED BY FLUSHING IN 0.243 TORR IN A 5.467 LITER BULB.
CALC INIT HCHO = .303 PPM; IN GOOD AGREEMENT W/ CHROMATROPIC ACID VALUE
BRADY 1193X, DASIBI 1212 (565 ML/MIN), TECO 148-1 (540 ML/MIN) USED

T=0 AT 1015 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	67.88
SSPOWER	KW	AVERAGE	15.12
RADIOM	MW/CM2	AVERAGE	0.174
H2O	PPM	AVERAGE	2.764E 04
NO	PPM	INIT COND	0.342
NO2-CORR	PPM	INIT COND	0.057
TOLUENE	PPM	INIT COND	1.008
HCHO	PPM	INIT COND	0.301
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.001
BZALD	PPM	INIT COND	0.001
ETHANE	PPM	INIT COND	0.004
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.002
PROPANE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -336
TOLUENE + FORMALDEHYDE
1978 NOV 16

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.562
430.	1.974
403.	1.791
380.	1.562
370.	1.394
360.	1.164
350.	1.000
340.	0.788
330.	0.516
320.	0.281
310.	0.091
300.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.650 L/MIN

+2 GC SAMPLES TAKEN

EC -336
TOLUENE + FORMALDEHYDE
1978 NOV 16

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM 10'C-600	TOLUENE PPM 5' C-600	HCHO PPM
900	-75.	******	******	******	******	0.000	******	******
905	-70.	******	******	******	******	******	0.001	******
950	-25.	******	******	******	******	1.021	******	******
1015	0.	0.000	0.342	0.097	0.439	1.008	0.978	0.301
1030	15.	0.000	0.269	0.150	0.419	******	******	******
1045	30.	0.010	0.181	0.219	0.397	0.874	0.886	******
1100	45.	0.032	0.106	0.262	0.364	******	******	******
1115	60.	0.081	0.060	0.271	0.333	0.810	0.838	0.197
1130	75.	0.142	0.040	0.251	0.290	******	******	******
1145	90.	0.195	0.029	0.216	0.245	0.738	0.763	******
1200	105.	0.254	0.024	0.175	0.198	******	******	******
1215	120.	0.310	0.022	0.132	0.150	0.673	0.710	0.165
1230	135.	0.362	0.021	0.090	0.107	******	******	******
1245	150.	0.391	0.018	0.057	0.074	0.592	0.634	******
1300	165.	0.393	0.017	0.042	0.058	******	******	******
1315	180.	0.388	0.015	0.035	0.049	0.574	0.599	0.145
1330	195.	0.371	0.017	0.032	0.047	******	******	******
1345	210.	0.359	0.015	0.028	0.043	0.549	0.568	******
1400	225.	0.349	0.018	0.027	0.040	******	******	******
1415	240.	0.335	0.016	0.029	0.040	0.535	0.547	0.129
1430	255.	0.325	0.013	0.028	0.042	******	******	******
1445	270.	0.315	0.017	0.027	0.042	0.514	0.526	******
1500	285.	0.303	0.017	0.026	0.039	******	******	******
1515	300.	0.293	0.016	0.025	0.038	0.490	0.510	0.130
1530	315.	0.286	0.015	0.019	0.033	******	******	******
1545	330.	0.278	0.017	0.027	0.042	0.474	0.498	******
1600	345.	0.271	0.018	0.021	0.036	******	******	******
1615	360.	0.264	0.016	0.023	0.034	0.452	0.481	0.129

EC -336
TOLUENE + FORMALDEHYDE
1978 NOV 16

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	BZALD PPM 5' C-600	BZALD PPM SP 1000	O-CRESOL PPM SP 1000	MNT PPM SP 1000	METHANE PPM	ETHANE PPM
900	-75.	******	0.0008	0.0001	0.0002	******	0.0001	******	******	******	******	******	1.14	0.0040
905	-70.	******	******	******	******	******	******	******	0.0016	0.0010	0.0002	0.0	******	******
950	-25.	******	0.0023	0.0003	0.0008	0.0002	0.0000	******	******	******	******	******	******	******
1015	0.	0.000	0.0024	******	0.0008	0.0001	0.0000	0.0	0.0009	******	******	******	******	0.0040
1030	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	30.	0.002	0.0065	0.0004	0.0029	0.0002	0.0001	0.0	0.0049	******	******	******	******	******
1100	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	60.	0.012	0.0051	0.0003	0.0048	******	0.0000	0.0	0.0095	0.0121	0.0165	0.0015	******	******
1130	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	90.	0.026	0.0065	******	0.0089	******	0.0001	0.0003	0.0122	******	******	******	******	******
1200	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	120.	0.039	0.0087	0.0017	0.0108	******	0.0001	0.0003	0.0139	0.0173	0.0031	0.0017	******	******
1230	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	150.	0.054	0.0084	******	0.0099	******	******	0.0003	0.0123	******	******	******	******	******
1300	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	180.	0.059	0.0088	******	0.0107	******	0.0001	0.0001	0.0138	0.0143	0.0021	0.0015	1.14	0.0038
1330	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	210.	0.059	0.0089	******	0.0101	******	******	0.0004	0.0142	******	******	******	******	******
1400	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	240.	0.057	0.0090	******	0.0073	******	******	0.0005	0.0158	0.0124	0.0025	0.0012	******	******
1430	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	270.	0.053	0.0097	0.0015	0.0110	******	******	0.0005	0.0126	******	******	******	******	******
1500	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	300.	0.053	0.0089	0.0008	0.0071	******	******	0.0004	0.0153	0.0108	0.0042	0.0014	******	******
1530	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	330.	0.050	0.0098	******	0.0111	******	******	0.0003	0.0139	******	******	******	******	******
1600	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1615	360.	0.048	0.0102	0.0012	0.0118	******	0.0001	0.0005	0.0155	0.0189	0.0057	0.0010	1.15	0.0038

EC -336
TOLUENE + FORMALDEHYDE
1978 NOV 16

CLOCK TIME	ELAPSED T(MIN)	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM	N-C4 PPM
900	-75.	0.0019	0.0023	0.0021	0.0009	0.0002	0.0001	0.0
905	-70.	******	******	******	******	******	******	******
950	-25.	******	******	******	******	******	******	******
1015	0.	0.0020	0.0024	0.0022	0.0009	0.0002	0.0001	0.0
1030	15.	******	******	******	******	******	******	******
1045	30.	******	******	******	******	******	******	******
1100	45.	******	******	******	******	******	******	******
1115	60.	******	******	******	******	******	******	******
1130	75.	******	******	******	******	******	******	******
1145	90.	******	******	******	******	******	******	******
1200	105.	******	******	******	******	******	******	******
1215	120.	******	******	******	******	******	******	******
1230	135.	******	******	******	******	******	******	******
1245	150.	******	******	******	******	******	******	******
1300	165.	******	******	******	******	******	******	******
1315	180.	0.0012	0.0033	0.0032	0.0010	******	0.0001	0.0000
1330	195.	******	******	******	******	******	******	******
1345	210.	******	******	******	******	******	******	******
1400	225.	******	******	******	******	******	******	******
1415	240.	******	******	******	******	******	******	******
1430	255.	******	******	******	******	******	******	******
1445	270.	******	******	******	******	******	******	******
1500	285.	******	******	******	******	******	******	******
1515	300.	******	******	******	******	******	******	******
1530	315.	******	******	******	******	******	******	******
1545	330.	******	******	******	******	******	******	******
1600	345.	******	******	******	******	******	******	******
1615	360.	0.0011	0.0048	0.0050	0.0009	0.0002	0.0001	0.0001

EC -336
TOLUENE + FORMALDEHYDE
1978 NOV 16

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	TENX VOL L
900	-75.	******	******	******	******	******	******
905	-70.	******	******	******	******	******	10.00
950	-25.	******	******	******	******	******	******
1015	0.	84.8	58.5	15.17	0.181	20.00	******
1030	15.	83.3	62.5	******	******	******	******
1045	30.	84.0	65.5	******	******	******	******
1100	45.	84.3	67.0	******	******	******	******
1115	60.	84.8	68.0	15.05	0.178	20.00	10.00
1130	75.	85.2	68.0	******	0.176	******	******
1145	90.	85.5	68.0	******	0.173	******	******
1200	105.	86.0	68.0	******	0.178	******	******
1215	120.	86.5	68.0	15.04	0.171	20.00	10.00
1230	135.	87.0	68.0	******	0.166	******	******
1245	150.	86.5	68.0	******	0.171	******	******
1300	165.	85.7	68.0	******	0.168	******	******
1315	180.	85.5	68.5	14.96	0.164	20.00	13.00
1330	195.	85.7	69.0	******	******	******	******
1345	210.	85.7	69.0	******	0.176	******	******
1400	225.	85.7	69.0	******	0.166	******	******
1415	240.	86.0	69.0	15.26	0.173	20.00	10.00
1430	255.	85.7	69.0	******	0.176	******	******
1445	270.	85.7	69.0	******	******	******	******
1500	285.	86.0	69.0	******	******	******	******
1515	300.	86.0	69.0	15.09	0.173	20.00	11.70
1530	315.	86.2	69.0	******	0.176	******	******
1545	330.	86.0	69.0	******	0.171	******	******
1600	345.	86.0	69.0	******	0.181	******	******
1615	360.	86.5	69.0	15.28	0.181	20.00	10.00

EC -337
TOLUENE + BENZALDEHYDE
1978 NOV 17

BEGIN IRRADIATION 1045; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
0920: EXPAND 0.165 TORR BENZALDEHYDE IN 5.467 L BULB INTO EC
CALCULATED BENZALDEHYDE INJECTED = 0.206 PPM IN EC
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193A, DASIBI 1212 (565ML/MIN), TECO148-1 (540ML/MIN) USED

T=0 AT 1045 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.0
REL HUM	%	AVERAGE	65.57
SSPOWER	Kw	AVERAGE	14.94
RADIOM	MW/CM2	AVERAGE	0.173
H2O	PPM	AVERAGE	2.708E 04
NO	PPM	INIT COND	0.322
NO2-CORR	PPM	INIT COND	0.124
TOLUENE	PPM	INIT COND	0.959
BZALD	PPM	INIT COND	0.172
HCHO	PPM	INIT COND	0.009
ACETALD	PPM	INIT COND	0.002
ACETONE	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.278
ETHANE	PPM	INIT COND	0.004
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.002
PROPANE	PPM	INIT COND	0.001
BENZENE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -337
TOLUENE + BENZALDEHYDE
1978 NOV 17

SPECTRAL DISTRIBUTION: WAVELENGTH(NM) REL. INTENSITY

WAVELENGTH(NM)	REL. INTENSITY
500.	2.469
430.	2.024
403.	1.786
380.	1.559
370.	1.395
360.	1.160
350.	1.000
340.	0.785
330.	0.533
320.	0.285
310.	0.090
300.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.634 L/MIN

42 GC SAMPLES TAKEN

EC -337
TOLUENE + BENZALDEHYDE
1978 NOV 17

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM 10'C-600	TOLUENE PPM 5' C-600	BZALD PPM 5' C-600	BZALD PPM SP 1000
945	-60.	******	******	******	******	0.000	******	******	******
1025	-20.	******	******	******	******	0.932	******	******	******
1045	0.	0.0	0.322	0.124	0.448	0.959	0.982	0.172	******
1100	15.	0.000	0.300	0.141	0.439	******	******	******	******
1115	30.	0.000	0.275	0.160	0.433	0.903	0.947	0.161	0.143
1130	45.	0.002	0.231	0.190	0.418	******	******	******	******
1145	60.	0.005	0.194	0.213	0.410	0.877	0.916	0.149	******
1200	75.	0.010	0.162	0.233	0.388	******	******	******	******
1215	90.	0.017	0.126	0.251	0.370	0.835	0.872	******	0.118
1230	105.	0.032	0.092	0.264	0.353	******	******	******	******
1245	120.	0.054	0.071	0.263	0.331	0.798	0.817	0.113	******
1300	135.	0.078	0.054	0.255	0.308	******	******	******	******
1315	150.	0.105	0.043	0.241	0.281	0.764	******	0.102	0.072
1330	165.	0.134	0.033	0.215	0.246	******	******	******	******
1345	180.	0.169	0.031	0.187	0.216	0.714	0.720	0.085	******
1400	195.	0.208	0.027	0.162	0.184	******	******	******	******
1415	210.	0.244	0.020	0.138	0.156	0.657	0.687	0.073	0.071
1430	225.	0.278	0.017	0.108	0.125	******	******	******	******
1445	240.	0.313	0.016	0.082	0.093	0.623	0.638	0.066	******
1500	255.	0.325	0.015	0.066	0.076	******	******	******	******
1515	270.	0.320	0.015	0.057	0.070	0.592	0.630	0.059	******
1530	285.	0.310	0.015	0.052	0.065	******	******	******	******
1545	300.	0.300	0.017	0.047	0.063	0.561	0.595	0.054	******
1600	315.	0.291	0.017	0.046	0.061	******	******	******	******
1615	330.	0.283	0.015	0.046	0.058	0.544	0.583	0.051	0.041
1630	345.	0.278	0.017	0.045	0.058	******	******	******	******
1645	360.	0.269	0.016	0.042	0.062	0.531	0.562	0.048	******

EC -337
TOLUENE + BENZALDEHYDE
1976 NOV 17

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	O-CRESOL PPM SP 1000	MNT PPM SP 1000	METHANE PPM	ETHANE PPM	ETHENE PPM
945	-60.	******	******	0.0010	0.0001	0.0003	0.0001	******	******	******	1.29	0.0043	0.0019
1025	-20.	******	******	0.0013	0.0001	0.0005	******	******	******	******	******	******	******
1045	0.	0.000	0.009	0.0015	******	0.0007	0.0000	0.0	******	******	1.28	0.0042	0.0019
1100	15.	******	******	******	******	******	******	******	******	******	******	******	******
1115	30.	0.001	******	0.0020	0.0001	0.0014	0.0000	0.0	0.0050	0.0003	******	******	******
1130	45.	******	******	******	******	******	******	******	******	******	******	******	******
1145	60.	0.002	0.018	0.0023	0.0001	0.0018	******	0.0	******	******	******	******	******
1200	75.	******	******	******	******	******	******	******	******	******	******	******	******
1215	90.	0.005	******	0.0030	******	0.0036	******	0.0	0.0111	0.0009	******	******	******
1230	105.	******	******	******	******	******	******	******	******	******	******	******	******
1245	120.	0.009	0.027	0.0034	******	0.0039	******	0.0003	******	******	******	******	******
1300	135.	******	******	******	******	******	******	******	******	******	******	******	******
1315	150.	0.015	******	0.0051	0.0008	0.0105	******	0.0002	0.0077	0.0016	******	******	******
1330	165.	******	******	******	******	******	******	******	******	******	******	******	******
1345	180.	0.022	0.041	0.0054	0.0008	0.0169	******	0.0003	******	******	1.27	0.0043	0.0016
1400	195.	******	******	******	******	******	******	******	******	******	******	******	******
1415	210.	0.031	******	0.0064	0.0008	0.0191	******	0.0003	0.0028	0.0017	******	******	******
1430	225.	******	******	******	******	******	******	******	******	******	******	******	******
1445	240.	0.041	0.048	0.0071	******	0.0172	******	0.0004	******	******	******	******	******
1500	255.	******	******	******	******	******	******	******	******	******	******	******	******
1515	270.	0.046	******	0.0070	******	0.0112	******	0.0005	******	******	******	******	******
1530	285.	******	******	******	******	******	******	******	******	******	******	******	******
1545	300.	0.047	0.061	0.0078	******	0.0190	******	0.0004	******	******	******	******	******
1600	315.	******	******	******	******	******	******	******	******	******	******	******	******
1615	330.	0.044	******	0.0086	******	0.0148	******	0.0005	0.0038	0.0011	******	******	******
1630	345.	******	******	******	******	******	******	******	******	******	******	******	******
1645	360.	0.039	0.065	0.0096	0.0017	0.0150	0.0001	0.0006	******	******	1.28	0.0042	0.0014

EC -337
TOLUENE + BENZALDEHYDE
1978 NOV 17

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM (PN)	ACETYLEN PPM (CMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM	BENZENE PPM
945	-60.	0.0032	0.0023	0.0009	0.0002	0.0001	0.0002
1025	-20.	******	******	******	******	******	0.0007
1045	0.	0.0024	0.0023	0.0009	0.0002	0.0001	0.0007
1100	15.	******	******	******	******	******	******
1115	30.	******	******	******	******	******	******
1130	45.	******	******	******	******	******	******
1145	60.	******	******	******	******	******	******
1200	75.	******	******	******	******	******	******
1215	90.	******	******	******	******	******	******
1230	105.	******	******	******	******	******	******
1245	120.	******	******	******	******	******	******
1300	135.	******	******	******	******	******	******
1315	150.	******	******	******	******	******	******
1330	165.	******	******	******	******	******	******
1345	180.	0.0033	0.0031	0.0009	0.0001	0.0001	******
1400	195.	******	******	******	******	******	******
1415	210.	******	******	******	******	******	******
1430	225.	******	******	******	******	******	******
1445	240.	******	******	******	******	******	******
1500	255.	******	******	******	******	******	******
1515	270.	******	******	******	******	******	******
1530	285.	******	******	******	******	******	******
1545	300.	******	******	******	******	******	******
1600	315.	******	******	******	******	******	******
1615	330.	******	******	******	******	******	******
1630	345.	******	******	******	******	******	******
1645	360.	0.0046	0.0047	0.0009	0.0001	******	0.0014

EC -337
TOLUENE + BENZALDEHYDE
1976 NOV 17

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	TENX VOL L
945	-60.	******	******	******	******	******	******
1025	-20.	******	******	******	******	******	******
1045	0.	84.8	56.0	15.09	0.178	20.00	10.00
1100	15.	84.8	59.0	******	0.176	******	******
1115	30.	84.5	62.0	******	0.168	******	10.00
1130	45.	85.0	64.0	******	0.168	******	******
1145	60.	84.8	65.0	14.83	0.173	20.00	******
1200	75.	84.8	66.0	******	0.173	******	******
1215	90.	84.8	66.5	******	0.171	******	10.00
1230	105.	85.2	66.5	******	0.166	******	******
1245	120.	85.7	66.5	14.88	0.173	20.00	******
1300	135.	85.7	66.5	******	0.171	******	******
1315	150.	85.7	66.5	******	******	******	11.05
1330	165.	86.0	66.5	******	******	******	******
1345	180.	86.0	66.5	14.95	0.173	20.00	******
1400	195.	86.2	66.5	******	******	******	******
1415	210.	86.2	66.0	******	******	******	10.00
1430	225.	85.7	66.5	******	******	******	******
1445	240.	86.2	66.5	14.36	0.178	20.00	******
1500	255.	86.2	66.5	******	0.173	******	******
1515	270.	86.2	66.5	******	0.176	******	10.00
1530	285.	86.2	67.0	******	0.176	******	******
1545	300.	86.5	66.5	15.40	0.173	20.00	******
1600	315.	86.7	67.0	******	******	******	******
1615	330.	86.5	66.5	******	******	******	10.00
1630	345.	86.2	66.5	******	0.173	******	******
1645	360.	86.2	66.5	15.08	******	20.00	******

EC -338
TOLUENE + N-BUTANE
1978 NOV 20

BEGIN IRRADIATION 1015; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193A; DASIBI 1212 (565 ML/MIN); TECO 148-1 (540 ML/MIN) USED
BECKMAN 6800 GN MANUAL OPERATION (FLOW 120 ML/MIN); CO FACTOR: 1.6/8.9

T=0 AT 1015 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	66.00
SSPOWER	Kw	AVERAGE	15.09
RADIOM	MW/CM2	AVERAGE	0.171
H2O	PPM	AVERAGE	2.771E 04
NO	PPM	INIT COND	0.346
NO2-CORR	PPM	INIT COND	0.100
TOLUENE	PPM	INIT COND	0.555
N-C4	PPM	INIT COND	2.026
HCHO	PPM	INIT COND	0.008
ACETONE	PPM	INIT COND	0.001
BZALD	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.377
ETHANE	PPM	INIT COND	0.004
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.003
BENZENE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -338
TOLUENE + N-BUTANE
1978 NOV 20

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.006
430.	1.786
403.	1.643
380.	1.469
370.	1.339
360.	1.141
350.	1.000
340.	0.791
330.	0.538
320.	0.290
310.	0.101
300.	0.0

k1=0.39 MIN-1

SAMPLING RATE = 1.751 L/MIN

>2 GC SAMPLES TAKEN

EC -338
TOLUENE + N-BUTANE
1978 NOV 20

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM 10'C-600	TOLUENE PPM 5' C-600	N-C4 PPM
850	-85.	******	******	******	******	0.000	0.000	******
950	-25.	******	******	******	******	0.943	******	2.023
1015	0.	0.0	0.346	C.100	0.447	0.955	0.983	2.026
1030	15.	0.002	C.288	0.143	0.433	******	******	******
1045	30.	0.005	0.216	0.205	0.421	0.906	0.925	1.958
1100	45.	0.020	0.142	0.263	0.400	******	******	******
1115	60.	0.051	C.062	0.299	0.379	0.832	0.870	1.902
1130	75.	0.100	C.053	0.301	0.351	******	******	******
1145	90.	0.147	0.035	0.285	0.315	0.801	0.835	1.848
1200	105.	0.191	0.031	0.256	0.283	******	******	******
1215	120.	0.247	C.024	C.221	0.244	0.757	0.804	1.804
1230	135.	0.288	0.018	0.189	0.212	******	******	******
1245	150.	0.340	0.018	0.157	0.173	0.736	0.765	1.749
1300	165.	0.379	0.018	0.128	0.142	******	******	******
1315	180.	0.418	0.016	0.101	0.115	0.683	0.722	1.710
1330	195.	0.449	0.016	0.081	0.090	******	******	******
1345	210.	0.474	C.012	0.061	0.074	0.670	0.690	1.661
1400	225.	0.481	0.015	C.050	0.062	******	******	******
1415	240.	0.484	0.015	0.038	0.051	0.652	0.672	1.642
1430	255.	0.479	0.012	0.036	0.047	******	******	******
1445	270.	0.467	0.015	0.035	0.045	0.620	0.657	1.615
1500	285.	0.459	0.012	0.034	0.044	******	******	******
1515	300.	0.449	C.013	0.033	0.044	0.617	0.639	1.591
1530	315.	0.437	C.016	0.028	0.039	******	******	******
1545	330.	0.430	C.013	0.029	0.043	0.591	0.622	1.564
1600	345.	0.420	0.011	0.029	0.040	******	******	******
1615	360.	0.410	C.013	0.029	0.040	0.590	0.622	1.540

EC -338
TOLUENE + N-BUTANE
1978 NOV 20

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	C2-N PPM	C4-N-2 PPM	BZALD PPM 5' C-600	BzALD PPM SP 1000	O-CRESOL PPM SP 1000
850	-85.	******	******	******	0.0007	0.0001	0.0002	******	0.0001	******		0.0026	******	******
950	-25.	******	******	******	******	0.0001	0.0004	0.0001	0.0000	******	******	0.0013	0.0012	0.0012
1015	0.	******	0.000	0.008	******	0.0001	0.0006	0.0000	0.0000	0.0	0.0	0.0009	******	******
1030	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	30.	******	0.002	******	0.0158	0.0001	0.0017	0.0004	0.0123	0.0	0.0020	0.0037	******	******
1100	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	60.	******	0.010	0.025	0.0333	0.0003	0.0041	******	0.0201	0.0	0.0049	0.0057	0.0093	0.0163
1130	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	90.	******	0.020	******	0.0499	0.0004	0.0099	******	0.0324	0.0002	0.0054	0.0077	******	******
1200	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	120.	******	0.033	0.042	0.0599	0.0008	0.0157	0.0018	0.0545	0.0002	0.0083	0.0095	******	******
1230	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	150.	******	0.046	******	0.0767	0.0018	0.0185	0.0024	0.0642	0.0002	0.0102	0.0103	******	******
1300	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	180.	******	0.060	0.055	0.0815	0.0017	0.0154	0.0022	0.0642	******	0.0116	0.0104	0.0157	0.0010
1330	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	210.	******	0.070	******	0.0785	0.0021	0.0098	0.0024	0.0529	0.0003	0.0125	0.0103	******	******
1400	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1415	240.	1.06	0.075	0.060	0.0968	0.0026	0.0168	0.0036	0.0817	0.0003	0.0132	0.0116	******	******
1430	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	270.	1.15	0.076	******	0.0945	0.0025	0.0153	******	0.0798	0.0003	0.0122	0.0119	******	******
1500	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	300.	1.39	0.075	0.073	0.0922	0.0023	0.0113	******	0.0760	0.0003	0.0109	0.0124	0.0124	0.0005
1530	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	330.	******	0.071	******	0.0838	0.0024	0.0134	******	0.0925	0.0003	0.0136	0.0107	******	******
1600	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1615	360.	1.66	0.071	0.091	0.0930	0.0024	0.0147	0.0048	0.1096	0.0003	0.0126	0.0117	0.0146	0.0010

EC -338
TOLUENE + N-BUTANE
1978 NOV 20

CLOCK TIME	ELAPSED T(MIN)	MNT PPM SP 1CCO	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM	BENZENE PPM
850	-85.	******	1.39	0.0043	0.0021	0.0032	0.0001
950	-25.	0.0	******	******	******	******	0.0006
1015	0.	******	1.38	0.0044	0.0020	0.0032	0.0007
1030	15.	******	******	******	******	******	******
1045	30.	******	******	******	******	******	******
1100	45.	******	******	******	******	******	******
1115	60.	0.0011	******	******	******	******	******
1130	75.	******	******	******	******	******	******
1145	90.	******	******	******	******	******	******
1200	105.	******	******	******	******	******	******
1215	120.	******	******	******	******	******	******
1230	135.	******	******	******	******	******	******
1245	150.	******	******	******	******	******	******
1300	165.	******	******	******	******	******	******
1315	180.	0.0015	1.36	0.0045	0.0019	0.0041	******
1330	195.	******	******	******	******	******	******
1345	210.	******	******	******	******	******	******
1400	225.	******	******	******	******	******	******
1415	240.	******	******	******	******	******	******
1430	255.	******	******	******	******	******	******
1445	270.	******	******	******	******	******	******
1500	285.	******	******	******	******	******	******
1515	300.	0.0011	******	******	******	******	******
1530	315.	******	******	******	******	******	******
1545	330.	******	******	******	******	******	0.0006
1600	345.	******	******	******	******	******	******
1615	360.	0.0011	1.38	0.0045	0.0022	0.0051	0.0007

EC -338
TOLUENE + N-BUTANE
1978 NOV 20

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	TENX VOL L
850	-85.	******	******	******	******	******	11.70
950	-25.	******	******	******	******	******	10.00
1015	0.	86.0	56.0	15.18	0.178	15.00	******
1030	15.	85.2	59.0	******	0.176	******	******
1045	30.	85.2	62.5	15.17	0.173	******	******
1100	45.	85.5	64.0	******	0.171	******	******
1115	60.	85.5	65.5	15.17	0.171	20.00	10.00
1130	75.	85.7	66.0	******	0.168	******	******
1145	90.	85.2	66.5	******	0.171	******	******
1200	105.	85.5	67.0	******	0.171	******	******
1215	120.	85.7	67.5	15.01	0.168	20.00	10.00
1230	135.	85.7	67.5	******	******	******	******
1245	150.	85.7	67.5	******	******	******	******
1300	165.	86.2	67.5	******	******	******	******
1315	180.	86.2	67.0	14.96	0.171	20.00	10.00
1330	195.	86.5	67.0	******	0.168	******	******
1345	210.	86.5	67.0	******	0.166	******	******
1400	225.	87.0	67.0	******	******	******	******
1415	240.	86.5	67.0	14.80	0.166	20.00	******
1430	255.	86.7	67.0	******	0.171	******	******
1445	270.	87.0	67.0	******	0.171	******	******
1500	285.	87.2	66.5	******	******	******	******
1515	300.	87.2	66.5	15.24	0.173	20.00	10.00
1530	315.	86.7	67.0	******	******	******	******
1545	330.	86.7	67.5	******	******	******	******
1600	345.	86.5	67.5	******	******	******	******
1615	360.	86.5	67.5	15.17	0.176	20.00	10.00

EC -339
TOLUENE + BENZALDEHYDE
1978 NOV 21

BEGIN IRRADIATION 0945; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
BASELINE ON PAN CHART NOISY
ME-N PRESENT AFTER T=5, BUT DOES NOT EXCEED 1 PPB
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
0650: 0.165 TORR BENZALDEHYDE IN 5.467 L BULB FLUSHED INTO ED
CALCULATED BENZALDEHYDE INJECTED = 0.200 PPM IN EC
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193X; DASIBI 1212 (565 ML/MIN); TECO 148-1 (540 ML/MIN) USED
BECKMAN 6800 ON MANUAL OPERATION (FLOW 120 ML/MIN); CO FACTOR: 1.6/8.35

T=0 AT 945 PST

	CALIB#
PAN	5
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.4
REL HUM	%	AVERAGE	63.97
SSPOWER	Kw	AVERAGE	15.20
RADIOM	MW/CM2	AVERAGE	0.169
H2O	PPM	AVERAGE	2.689E 04
NO	PPM	INIT COND	0.341
NO2-CORR	PPM	INIT COND	0.102
TOLUENE	PPM	INIT COND	0.536
BZALD	PPM	INIT COND	0.187
HCHO	PPM	INIT COND	0.002
ACETALD	PPM	INIT COND	0.001
METHANE	PPM	INIT COND	1.369
ETHANE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.002
ACETYLEN	PPM	INIT COND	0.004
PROPANE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -339
TOLUENE + BENZALDEHYDE
1976 NOV 21

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.579
430.	2.066
403.	1.815
380.	1.569
370.	1.382
360.	1.152
350.	1.000
340.	0.769
330.	0.523
320.	0.275
310.	0.096
300.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.676 L/MIN

42 GC SAMPLES TAKEN

EC -339
TOLUENE + BENZALDEHYDE
1978 NOV 21

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM 10°C-600	TOLUENE PPM 5° C-600	BZALD PPM 5° C-600	BZALD PPM SP 1000
925	-20.	******	******	******	******	******	0.571	0.173	0.141
930	-17.	******	******	******	******	0.533	******	******	******
945	0.	0.0	0.341	0.102	0.445	0.536	0.570	0.187	******
1000	15.	0.000	0.329	0.112	0.439	******	******	******	******
1015	30.	0.000	0.309	0.122	0.434	0.519	0.532	0.173	******
1030	45.	0.0	0.293	0.134	0.426	******	******	******	******
1045	60.	0.000	0.274	0.153	0.421	0.511	0.517	0.163	0.155
1100	75.	0.000	0.249	0.164	0.410	******	******	******	******
1115	90.	0.000	0.223	0.176	0.401	0.460	0.479	0.147	******
1130	105.	0.002	0.202	0.189	0.391	******	******	******	******
1145	120.	0.005	0.177	0.205	0.378	0.468	0.493	0.134	0.115
1200	135.	0.010	0.155	0.218	0.365	******	******	******	******
1215	150.	0.017	0.133	0.222	0.351	0.450	0.469	0.125	******
1230	165.	0.022	0.111	0.231	0.338	******	******	******	******
1245	180.	0.029	0.094	0.234	0.323	0.416	0.444	0.106	0.084
1300	195.	0.039	0.078	0.235	0.308	******	******	******	******
1315	210.	0.049	0.067	0.231	0.294	0.401	0.417	0.091	******
1330	225.	0.061	0.055	0.227	0.273	******	******	******	******
1345	240.	0.073	0.044	0.220	0.264	0.382	0.391	0.083	0.070
1400	255.	0.088	0.040	0.206	0.247	******	******	******	******
1415	270.	0.105	0.034	0.200	0.226	0.356	0.379	0.074	******
1430	285.	0.122	0.033	0.183	0.209	******	******	******	******
1445	300.	0.137	0.026	0.169	0.191	0.345	0.357	0.065	0.062
1500	315.	0.159	0.022	0.155	0.176	******	******	******	******
1515	330.	0.178	0.018	0.139	0.160	0.322	0.340	0.056	******
1530	345.	0.200	0.020	0.126	0.142	******	******	******	******
1545	360.	0.225	0.016	0.110	0.119	0.301	0.318	0.046	******

EC -539
TOLUENE + BENZALDEHYDE
1978 NOV 21

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	O-CRESOL PPM SP 1000	MAT PPM SP 1000	METHANE PPM	ETHANE PPM	ETHENE PPM
925	-20.	******	******	******	******	******	******	******	******	0.0	0.0	******	******	******
928	-17.	******	******	******	0.0010	0.0001	0.0003	0.0001	0.0001	******	******	******	******	******
945	0.	******	0.000	0.002	0.0012	0.0001	0.0004	******	0.0001	******	******	1.07	0.0047	0.0025
1000	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	30.	******	0.000	******	0.0016	******	0.0007	******	0.0001	******	******	******	******	******
1030	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	60.	0.42	0.001	0.002	0.0022	******	0.0007	******	******	******	******	******	******	******
1100	75.	******	******	******	******	******	******	******	******	0.0027	0.0001	******	******	******
1115	90.	******	0.001	******	0.0025	******	0.0016	******	0.0001	******	******	******	******	******
1130	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	120.	******	0.001	0.013	0.0035	0.0001	0.0022	******	******	0.0047	0.0004	******	******	******
1200	135.	0.44	******	******	******	******	******	******	******	******	******	******	******	******
1215	150.	******	0.003	******	0.0038	0.0002	0.0026	******	******	******	******	******	******	******
1230	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1245	180.	0.53	0.005	0.021	0.0039	******	0.0023	******	******	0.0036	0.0007	1.07	0.0045	0.0021
1300	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1315	210.	******	0.007	******	0.0043	******	0.0032	******	******	******	******	******	******	******
1330	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1345	240.	0.70	0.009	0.025	0.0054	0.0005	0.0070	******	******	******	******	******	******	******
1400	255.	******	******	******	******	******	******	******	0.0001	******	0.0004	******	******	******
1415	270.	******	0.012	******	0.0040	******	0.0045	******	******	******	******	******	******	******
1430	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1445	300.	0.68	0.015	******	0.0062	0.0009	0.0099	******	0.0001	0.0022	0.0011	******	******	******
1500	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1515	330.	******	0.019	******	0.0063	******	0.0114	******	0.0001	******	******	******	******	******
1530	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1545	360.	0.80	0.024	0.048	0.0065	******	0.0098	******	0.0001	******	******	1.08	0.0045	0.0017

EC -339
TOLUENE + BENZALDEHYDE
1978 NOV 21

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM	N-C4 PPM	BENZENE PPM
925	-20.	******	******	******	******	******	******	******
928	-17.	******	******	******	******	******	******	0.0004
945	0.	0.0041	0.0037	0.0011	0.0002	0.0001	0.0	0.0005
1000	15.	******	******	******	******	******	******	******
1015	30.	******	******	******	******	******	******	******
1030	45.	******	******	******	******	******	******	******
1045	60.	******	******	******	******	******	******	******
1100	75.	******	******	******	******	******	******	******
1115	90.	******	******	******	******	******	******	******
1130	105.	******	******	******	******	******	******	******
1145	120.	******	******	******	******	******	******	******
1200	135.	******	******	******	******	******	******	******
1215	150.	******	******	******	******	******	******	******
1230	165.	******	******	******	******	******	******	******
1245	180.	0.0041	0.0040	0.0011	0.0001	0.0001	0.0001	******
1300	195.	******	******	******	******	******	******	******
1315	210.	******	******	******	******	******	******	******
1330	225.	******	******	******	******	******	******	******
1345	240.	******	******	******	******	******	******	******
1400	255.	******	******	******	******	******	******	******
1415	270.	******	******	******	******	******	******	******
1430	285.	******	******	******	******	******	******	******
1445	300.	******	******	******	******	******	******	******
1500	315.	******	******	******	******	******	******	******
1515	330.	******	******	******	******	******	******	0.0007
1530	345.	******	******	******	******	******	******	******
1545	360.	0.0051	0.0049	0.0010	0.0001	0.0001	0.0001	0.0007

EC -339
TOLUENE + BENZALDEHYDE
1978 NOV 21

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER Kh	RADIOM Mh/CM2	HCHO VOL L	TENX VOL L
925	-20.	******	******	******	******	******	10.00
926	-17.	******	******	******	******	******	******
945	0.	66.0	47.0	15.21	0.173	20.00	******
1000	15.	84.5	52.5	******	0.176	******	******
1015	30.	84.8	60.0	******	0.171	******	******
1030	45.	85.0	64.0	******	0.166	******	******
1045	60.	85.2	64.5	15.09	0.168	20.00	10.00
1100	75.	85.5	65.0	******	0.168	******	******
1115	90.	86.0	65.5	******	0.171	******	******
1130	105.	86.0	65.5	******	0.173	******	******
1145	120.	86.2	65.5	15.01	0.166	20.00	10.00
1200	135.	86.5	66.0	******	0.171	******	******
1215	150.	86.7	65.5	******	0.171	******	******
1230	165.	86.7	65.5	******	0.168	******	******
1245	180.	87.0	65.5	15.17	0.166	20.00	10.00
1300	195.	87.0	65.5	******	0.173	******	******
1315	210.	86.5	65.5	******	0.168	******	******
1330	225.	86.5	65.5	******	0.168	******	******
1345	240.	86.7	65.5	15.27	0.164	20.00	12.35
1400	255.	87.0	65.0	******	0.166	******	******
1415	270.	87.0	65.0	******	0.164	******	******
1430	285.	86.7	65.0	******	0.168	******	******
1445	300.	87.0	65.0	15.33	0.171	******	10.00
1500	315.	87.0	65.0	******	0.171	******	******
1515	330.	86.7	65.0	******	******	******	******
1530	345.	87.0	65.0	******	******	******	******
1545	360.	87.0	65.0	15.33	0.171	20.00	******

EC -340
TOLUENE
1978 NOV 22

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
GRADY 1193X; DASIBI 1212 (565 ML/MIN); TECO 148-1 (540 ML/MIN) USED
BECKMAN 6800 ON MANUAL OPERATION (FLOW 120 ML/MIN); CO FACTOR: 1.6/19.0

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	63.20
SSPOWER	KW	AVERAGE	15.18
RADIOM	MW/CM2	AVERAGE	0.167
H2O	PPM	AVERAGE	2.590E 04
NO	PPM	INIT COND	0.333
NOX-CORR	PPM	INIT COND	0.056
TOLUENE	PPM	INIT COND	0.537
CO	PPM	INIT COND	2.593
HCHO	PPM	INIT COND	0.005
ACETALD	PPM	INIT COND	0.001
BZALD	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	1.205
ETHANE	PPM	INIT COND	0.005
ETHENE	PPM	INIT COND	0.003
ACETYLEN	PPM	INIT COND	0.004
PROPANE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -340
TOLUENE
1978 NOV 22

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.596
430.	2.074
403.	1.824
380.	1.578
370.	1.391
360.	1.173
350.	1.000
340.	0.777
330.	0.523
320.	0.277
310.	0.094
300.	0.0

K1=0.40 MIN-1

SAMPLING RATE = 1.759 L/MIN

42 GC SAMPLES TAKEN

EC -340
TOLUENE
1976 NOV 22

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	TOLUENE PPM 10'C-600	TOLUENE PPM 5' C-600
830	-60.	******	******	******	******	0.000	0.000
905	-25.	0.0	0.352	0.066	******	******	0.570
930	0.	0.0	0.333	0.096	0.430	0.537	0.579
945	15.	0.000	0.304	0.128	0.428	******	******
1000	30.	0.000	0.274	0.148	0.421	0.504	0.543
1015	45.	0.002	0.232	0.160	0.409	******	******
1030	60.	0.005	0.186	0.209	0.395	0.481	0.507
1045	75.	0.012	0.148	0.233	0.378	******	******
1100	90.	0.017	0.123	0.239	0.363	0.437	0.463
1115	105.	0.029	0.098	0.250	0.344	******	******
1130	120.	0.049	0.074	0.244	0.320	0.422	0.436
1145	135.	0.064	0.060	0.246	0.308	******	******
1200	150.	0.081	0.049	0.233	0.281	0.388	0.404
1215	165.	0.100	0.040	0.223	0.259	******	******
1230	180.	0.125	0.033	0.211	0.242	0.362	0.367
1245	195.	0.142	0.031	0.191	0.218	******	******
1300	210.	0.164	0.026	0.169	0.193	0.342	0.360
1315	225.	0.191	0.021	0.152	0.173	******	******
1330	240.	0.210	0.020	0.134	0.151	0.313	0.341
1345	255.	0.239	0.017	0.119	0.131	******	******
1400	270.	0.266	0.016	0.099	0.114	0.289	0.308
1415	285.	0.293	0.015	0.082	0.096	******	******
1430	300.	0.318	0.015	0.065	0.076	0.260	0.282
1445	315.	0.335	0.012	0.050	0.062	******	******
1500	330.	0.344	0.011	0.042	0.050	0.238	0.251
1515	345.	******	******	******	******	******	******
1530	360.	******	******	******	******	0.214	0.230

EC -340
TOLUENE
1978 NOV 22

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	BZALD PPM 10*C-600	BZALD PPM SP 1000	O-CRESOL PPM SP 1000	MNT PPM SP 1000	METHANE PPM
830	-60.	******	******	******	0.001	0.0001	0.0001	0.0000	******	0.0025	******	******	******	1.20
905	-25.	******	******	******	******	******	******	******	******	0.0015	0.0033	0.0006	0.0	******
930	0.	2.59	C.000	0.005	0.001	******	0.0005	0.0000	0.0	0.0020	******	******	******	1.20
945	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.001	******	0.001	0.0001	0.0010	0.0000	0.0	0.0033	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	2.85	C.002	0.012	0.002	0.0001	0.0015	0.0000	0.0	0.0040	0.0061	0.0024	0.0003	******
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.004	******	0.002	******	0.0020	******	0.0	0.0058	******	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	2.72	C.007	0.023	0.003	0.0002	0.0043	0.0000	0.0	0.0071	0.0100	0.0121	0.0010	******
1145	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1200	150.	******	0.011	******	0.003	******	0.0042	******	0.0003	0.0074	******	******	******	******
1215	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1230	180.	2.74	0.015	0.026	0.004	******	0.0084	0.0000	0.0003	0.0084	0.0185	0.0040	0.0007	1.19
1245	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1300	210.	******	0.019	******	0.004	******	0.0064	******	0.0004	0.0081	******	******	******	******
1315	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1330	240.	2.80	0.024	0.042	0.005	******	0.0120	******	0.0003	0.0082	0.0089	0.0013	0.0011	******
1345	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1400	270.	******	0.027	******	0.006	0.0017	0.0142	******	0.0003	0.0074	******	******	******	******
1415	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1430	300.	2.93	0.034	0.048	0.006	0.0023	0.0159	******	0.0005	0.0070	0.0122	0.0012	0.0011	******
1445	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1500	330.	******	C.039	******	0.006	******	0.0148	******	0.0005	0.0066	******	******	******	******
1515	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1530	360.	2.99	0.042	0.044	0.006	0.0021	0.0164	0.0001	0.0004	0.0071	0.0086	0.0005	0.0010	1.20

EC -340
TOLUENE
1978 NOV 22

CLOCK TIME	ELAPSED T(MIN)	ETHANE PPM	ETHENE PPM	ACETYLEN PPM	ACETYLEN PPM	PROPANE PPM	PROPENE PPM	I-C4 PPM	N-C4 PPM	BENZENE PPM
830	-60.	0.0049	0.0027	0.0042	0.0038	0.0009	0.000	0.0001	******	0.0001
845	-25.	******	******	******	******	******	******	******	******	******
930	0.	0.0046	0.0027	0.0043	0.0038	0.0009	0.000	0.0001	0.000	0.0005
945	15.	******	******	******	******	******	******	******	******	******
1000	30.	******	******	******	******	******	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******
1030	60.	******	******	******	******	******	******	******	******	******
1045	75.	******	******	******	******	******	******	******	******	******
1100	90.	******	******	******	******	******	******	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******
1130	120.	******	******	******	******	******	******	******	******	******
1145	135.	******	******	******	******	******	******	******	******	******
1200	150.	******	******	******	******	******	******	******	******	******
1215	165.	******	******	******	******	******	******	******	******	******
1230	180.	0.0045	0.0017	0.0043	0.0044	0.0009	0.000	0.0001	0.000	******
1245	195.	******	******	******	******	******	******	******	******	******
1300	210.	******	******	******	******	******	******	******	******	******
1315	225.	******	******	******	******	******	******	******	******	******
1330	240.	******	******	******	******	******	******	******	******	******
1345	255.	******	******	******	******	******	******	******	******	******
1400	270.	******	******	******	******	******	******	******	******	******
1415	285.	******	******	******	******	******	******	******	******	******
1430	300.	******	******	******	******	******	******	******	******	******
1445	315.	******	******	******	******	******	******	******	******	******
1500	330.	******	******	******	******	******	******	******	******	0.0003
1515	345.	******	******	******	******	******	******	******	******	******
1530	360.	0.0045	0.0012	0.0051	0.0055	0.0008	0.000	0.0001	0.000	0.0003

EC -340
TOLUENE
1978 NOV 22

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIGM MW/CM2	HCHO VOL L	TENX VOL L
850	-60.	******	******	******	******	******	******
905	-25.	83.3	47.0	******	******	******	10.00
930	0.	84.0	50.5	14.98	0.173	20.00	******
945	15.	84.3	55.5	******	0.166	******	******
1000	30.	84.5	59.0	******	0.166	******	******
1015	45.	84.5	61.5	******	0.168	******	******
1030	60.	84.5	63.5	15.17	******	20.00	10.00
1045	75.	85.0	64.0	******	******	******	******
1100	90.	85.0	64.5	******	******	******	******
1115	105.	85.2	64.5	******	******	******	******
1130	120.	85.7	64.5	14.93	0.164	20.00	10.00
1145	135.	85.7	64.5	******	0.171	******	******
1200	150.	86.2	64.5	******	******	******	******
1215	165.	86.5	64.5	******	******	******	******
1230	180.	86.5	64.5	15.56	0.173	20.00	10.00
1245	195.	86.7	64.5	******	0.168	******	******
1300	210.	87.0	64.5	15.21	0.166	******	******
1315	225.	86.7	64.0	******	0.164	******	******
1330	240.	87.2	64.0	15.17	0.166	20.00	10.00
1345	255.	87.0	64.0	******	******	******	******
1400	270.	87.0	64.0	******	******	******	******
1415	285.	86.7	64.5	******	******	******	******
1430	300.	87.0	64.5	15.25	0.168	20.00	12.35
1445	315.	86.7	64.5	******	0.168	******	******
1500	330.	86.2	64.5	******	0.164	******	******
1515	345.	******	******	******	******	******	******
1530	360.	******	******	15.21	******	20.00	10.00

EC -343
M-XYLENE
1978 NOV 29

BEGIN IRRADIATION 1030; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
ME-N PRESENT BUT LESS THAN 0.5 PPB
C2-N PRESENT BUT LESS THAN 0.5 PPB
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN

SOLAR SIMULATOR POWER SET 10% TOO LOW FOR FIRST 105 MINUTES.
INCREASED FROM 13.46 TO 15.58 KW AT 1133

POOR TEMPERATURE CONTROL FOR FIRST 2 HOURS DUE TO SYSTEM MALFUNCTION

1030-1200: ANOMALOUSLY LOW 10' C-600 M-XYLENE VALUES REJECTED
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TOLUALD MEASUREMENT ON SP-1000 NOT REPORTED BECAUSE OF INTERFERING PEAK
M-XYLENE VALUES FROM 5' & 10' C-600 COLUMNS PREFERRED OVER THOSE FROM SP-1000
M-XYLENE ADDED BY FLUSHING IN .4011 TORR IN 5.467 LITER BULB
CALCULATED INITIAL M-XYLENE = .5003 PPM
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193X; DASIBI 1212 (530 ML/MIN), TECO 148-1 (540 ML/MIN) USED

T=0 AT 1030 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.3
REL HUM	%	AVERAGE	71.13
SSPOWER	KW	AVERAGE	15.01
RADIOM	MW/CM2	AVERAGE	0.161
H2O	PPM	AVERAGE	2.948E 04
NO	PPM	INIT COND	0.214
NO2-CORR	PPM	INIT COND	0.066
M-XYL	PPM	INIT COND	0.362
HCHO	PPM	INIT COND	0.009
ACETALD	PPM	INIT COND	0.001
BZALD	PPM	INIT COND	0.001
M-TOLALD	PPM	INIT COND	0.002
METHANE	PPM	INIT COND	2.344
ETHANE	PPM	INIT COND	0.009
ETHENE	PPM	INIT COND	0.005
ACETYLEN	PPM	INIT COND	0.005
PROPANE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -343
M-XYLENE
1976 NOV 29

SPECTRAL DISTRIBUTION:

WAVELENGTH(NM)	REL. INTENSITY
500.	2.420
430.	2.046
403.	1.758
380.	1.552
370.	1.380
360.	1.153
350.	1.000
340.	0.773
330.	0.528
320.	0.287
310.	0.131
300.	0.010
290.	0.0

K1=0.38 MIN-1

SAMPLING RATE = 1.570 L/MIN

40 GC SAMPLES TAKEN

EC -343
M-XYLENE
1978 NOV 29

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	M-XYL PPM 10'C-600	M-XYL PPM 5' C-600	M-XYL PPM SP 1000
930	-60.	******	******	******	******	******	0.522	0.520
940	-50.	******	******	******	******	0.498	******	******
1030	0.	0.000	0.214	0.066	0.279	******	0.491	******
1035	5.	0.0	0.210	0.067	0.276	******	******	******
1040	10.	0.000	0.182	0.092	0.271	******	******	******
1045	15.	0.005	0.133	0.130	0.259	******	******	******
1050	20.	0.015	0.106	0.143	0.248	******	******	******
1055	25.	0.039	0.059	0.176	0.234	******	******	******
1100	30.	0.071	0.038	0.189	0.223	******	0.378	******
1105	35.	0.110	0.028	0.175	0.202	******	******	******
1110	40.	0.151	0.026	0.155	0.177	******	******	******
1115	45.	0.176	0.022	0.136	0.158	******	******	******
1120	50.	0.200	0.021	0.121	0.139	******	******	******
1125	55.	0.227	0.018	0.101	0.117	******	******	******
1130	60.	0.252	0.017	0.081	0.097	******	0.267	0.299
1135	65.	0.269	0.016	0.075	0.088	******	******	******
1140	70.	0.281	0.016	0.067	0.079	******	******	******
1145	75.	0.283	0.015	0.056	0.071	******	******	******
1150	80.	0.281	0.013	0.041	0.053	******	******	******
1155	85.	0.276	0.012	0.035	0.048	******	******	******
1200	90.	0.274	0.012	0.030	0.041	******	******	******
1205	95.	0.264	0.015	0.031	0.043	******	******	******
1210	100.	0.254	0.011	0.028	0.040	******	******	******
1215	105.	0.244	0.012	0.028	0.041	******	******	******
1220	110.	0.235	0.012	0.026	0.037	******	******	******
1225	115.	0.227	0.012	0.025	0.036	******	******	******
1230	120.	0.220	0.013	0.024	0.034	0.179	0.174	0.197
1245	135.	0.198	0.011	0.022	0.032	******	******	******
1300	150.	0.178	0.013	0.016	0.028	0.162	******	******
1315	165.	0.164	0.012	0.018	0.026	******	******	******
1330	180.	0.151	0.013	0.014	0.027	0.150	0.148	0.193
1345	195.	0.139	0.011	0.016	0.028	******	******	******
1400	210.	0.130	0.013	0.015	0.026	0.137	0.128	******
1415	225.	0.122	0.012	0.018	0.029	******	******	******
1430	240.	0.115	0.011	0.017	0.027	0.125	0.125	******
1445	255.	0.110	0.012	0.015	0.025	******	******	******
1500	270.	0.105	0.012	0.016	0.025	0.114	0.116	******
1515	285.	0.100	0.012	0.013	0.023	******	******	******
1530	300.	0.100	0.011	0.013	0.022	0.105	0.105	0.121
1545	315.	0.095	0.011	0.014	0.023	******	******	******
1600	330.	0.095	0.011	0.015	0.021	0.095	0.094	******
1615	345.	0.095	0.010	0.016	0.023	******	******	******
1630	360.	0.093	0.009	0.014	0.020	******	0.062	******

EC -343
M-XYLENE
1978 NOV 29

CLOCK TIME	ELAPSED T(MIN)	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BZALD PPM 5' C-600	M-TOLALD PPM 5' C-600	METHANE PPM	ETHANE PPM	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (GMS)	PROPANE PPM
930	-60.	******	******	******	******	******	0.0013	0.0046	******	******	******	******	******	******
940	-50.	******	******	0.0010	0.0	0.0004	******	******	******	******	******	******	******	******
1030	0.	0.000	0.009	0.0010	0.0	0.0005	0.0007	0.0023	2.34	0.0086	0.0048	0.0049	0.0022	0.0009
1035	5.	******	******	******	******	******	******	******	******	******	******	******	******	******
1040	10.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
1050	20.	******	******	******	******	******	******	******	******	******	******	******	******	******
1055	25.	******	******	******	******	******	******	******	******	******	******	******	******	******
1100	30.	0.014	******	0.0027	******	0.0069	0.0003	0.0071	******	******	******	******	******	******
1105	35.	******	******	******	******	******	******	******	******	******	******	******	******	******
1110	40.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1120	50.	******	******	******	******	******	******	******	******	******	******	******	******	******
1125	55.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	60.	0.059	0.050	0.0050	******	0.0199	0.0008	0.0102	******	******	******	******	******	******
1135	65.	******	******	******	******	******	******	******	******	******	******	******	******	******
1140	70.	******	******	******	******	******	******	******	******	******	******	******	******	******
1145	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1150	80.	******	******	******	******	******	******	******	******	******	******	******	******	******
1155	85.	******	******	******	******	******	******	******	******	******	******	******	******	******
1200	90.	0.076	******	0.0064	******	0.0158	******	******	******	******	******	******	******	******
1205	95.	******	******	******	******	******	******	******	******	******	******	******	******	******
1210	100.	******	******	******	******	******	******	******	******	******	******	******	******	******
1215	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1220	110.	******	******	******	******	******	******	******	******	******	******	******	******	******
1225	115.	******	******	******	******	******	******	******	******	******	******	******	******	******
1230	120.	0.080	0.050	0.0061	******	0.0076	0.0004	0.0092	******	******	******	******	******	******
1245	135.	******	******	******	******	******	******	******	******	******	******	******	******	******
1300	150.	0.079	******	0.0057	0.0014	0.0066	******	******	******	******	******	******	******	******
1315	165.	******	******	******	******	******	******	******	******	******	******	******	******	******
1330	180.	0.081	0.067	0.0068	0.0009	0.0099	0.0006	0.0097	1.91	0.0071	0.0029	0.0043	0.0026	0.0008
1345	195.	******	******	******	******	******	******	******	******	******	******	******	******	******
1400	210.	0.078	******	0.0071	******	0.0094	0.0018	0.0090	******	******	******	******	******	******
1415	225.	******	******	******	******	******	******	******	******	******	******	******	******	******
1430	240.	0.074	0.074	0.0065	******	0.0044	0.0011	0.0086	******	******	******	******	******	******
1445	255.	******	******	******	******	******	******	******	******	******	******	******	******	******
1500	270.	0.076	******	0.0076	******	0.0049	0.0015	0.0083	******	******	******	******	******	******
1515	285.	******	******	******	******	******	******	******	******	******	******	******	******	******
1530	300.	0.076	0.088	0.0071	******	0.0040	0.0002	0.0068	******	******	******	******	******	******
1545	315.	******	******	******	******	******	******	******	******	******	******	******	******	******
1600	330.	0.074	******	0.0081	******	0.0064	0.0019	0.0068	******	******	******	******	******	******
1615	345.	******	******	******	******	******	******	******	******	******	******	******	******	******
1630	360.	0.072	0.077	0.0086	0.0008	0.0073	0.0004	0.0063	1.93	0.0067	0.0026	0.0045	0.0027	0.0006

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M-XYLENE
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CLOCK TIME	ELAPSED T(MIN)	PROPENE PPM	I-C4 PPM	N-C4 PPM	BENZENE PPM	TOLUENE PPM
930	-60.	******	******	******	******	******
940	-50.	******	******	******	0.0002	0.001
1030	0.	0.000	0.0001	0.0000	0.0002	0.001
1035	5.	******	******	******	******	******
1040	10.	******	******	******	******	******
1045	15.	******	******	******	******	******
1050	20.	******	******	******	******	******
1055	25.	******	******	******	******	******
1100	30.	******	******	******	******	******
1105	35.	******	******	******	******	******
1110	40.	******	******	******	******	******
1115	45.	******	******	******	******	******
1120	50.	******	******	******	******	******
1125	55.	******	******	******	******	******
1130	60.	******	******	******	******	******
1135	65.	******	******	******	******	******
1140	70.	******	******	******	******	******
1145	75.	******	******	******	******	******
1150	80.	******	******	******	******	******
1155	85.	******	******	******	******	******
1200	90.	******	******	******	******	******
1205	95.	******	******	******	******	******
1210	100.	******	******	******	******	******
1215	105.	******	******	******	******	******
1220	110.	******	******	******	******	******
1225	115.	******	******	******	******	******
1230	120.	******	******	******	******	******
1245	135.	******	******	******	******	******
1300	150.	******	******	******	******	******
1315	165.	******	******	******	******	******
1330	180.	0.000	0.0001	0.0001	******	******
1345	195.	******	******	******	******	******
1400	210.	******	******	******	******	******
1415	225.	******	******	******	******	******
1430	240.	******	******	******	******	******
1445	255.	******	******	******	******	******
1500	270.	******	******	******	******	******
1515	285.	******	******	******	******	******
1530	300.	******	******	******	******	******
1545	315.	******	******	******	******	******
1600	330.	******	******	******	0.0001	0.001
1615	345.	******	******	******	******	******
1630	360.	0.000	0.0001	0.0000	0.0001	0.001

EC -343
M-XYLENE
1978 NOV 29

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MR/CM2	HCHO VOL L	TENX VOL L
930	-60.	******	******	******	******	******	9.92
940	-50.	******	******	******	******	******	******
1030	0.	86.5	46.5	13.46	0.134	20.00	******
1035	5.	91.6	49.0	******	0.139	******	******
1040	10.	90.6	52.5	******	0.139	******	******
1045	15.	89.4	57.5	******	0.139	******	******
1050	20.	89.2	62.0	******	0.139	******	******
1055	25.	89.4	65.0	******	0.137	******	******
1100	30.	89.9	66.0	******	0.134	******	******
1105	35.	90.1	67.0	******	******	******	******
1110	40.	87.9	68.0	******	******	******	******
1115	45.	86.7	69.0	******	******	******	******
1120	50.	86.0	70.0	******	******	******	******
1125	55.	87.9	71.5	******	0.137	******	******
1130	60.	87.2	72.0	15.58	0.137	20.00	9.76
1135	65.	87.0	72.5	******	0.171	******	******
1140	70.	85.0	71.5	******	0.169	******	******
1145	75.	85.0	71.5	******	0.166	******	******
1150	80.	87.9	73.0	******	0.171	******	******
1155	85.	89.9	73.0	******	0.173	******	******
1200	90.	89.6	73.0	******	0.166	******	******
1205	95.	87.7	73.0	******	0.169	******	******
1210	100.	86.7	73.0	******	0.169	******	******
1215	105.	86.2	73.0	******	0.166	******	******
1220	110.	85.7	73.0	******	0.169	******	******
1225	115.	85.5	73.0	******	0.166	******	******
1230	120.	85.5	73.0	15.17	0.166	20.00	10.08
1245	135.	85.7	73.0	******	******	******	******
1300	150.	85.5	73.0	******	******	******	******
1315	165.	85.0	73.0	******	0.166	******	******
1330	180.	85.2	73.0	15.17	0.164	20.00	9.76
1345	195.	85.5	73.0	******	******	******	******
1400	210.	85.5	73.0	******	******	******	******
1415	225.	85.7	73.0	******	******	******	******
1430	240.	85.0	73.0	15.09	0.166	20.00	10.61
1445	255.	85.0	73.0	******	0.164	******	******
1500	270.	85.0	73.0	******	0.166	******	******
1515	285.	86.0	73.0	******	0.169	******	******
1530	300.	85.5	73.0	15.21	0.164	20.00	10.40
1545	315.	85.2	73.0	******	******	******	******
1600	330.	86.0	73.0	******	******	******	******
1615	345.	85.7	73.0	******	******	******	******
1630	360.	86.2	73.0	15.36	0.171	20.00	******

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M-XYLENE
1978 NOV 30

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
C2-N PRESENT BUT DOES NOT EXCEED 1 PPB
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-60C/C-22 COLUMN
10' C-600 IS 10' 10% C-60C/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TOLUALD MEASUREMENT ON SP-1000 NOT REPORTED BECAUSE OF INTERFERING PEAK
M-XYLENE VALUES FROM 5' & 10' C-600 COLUMNS PREFERRED OVER THOSE FROM SP-1000
M-XYLENE ADDED BY FLUSHING IN .4001 TORR IN 5.467 LITER BULB.
CALCULATED INITIAL M-XYLENE = .4990 PPM
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193X; BASIBI 1212 (530 ML/MIN); TECO 148-1 (540 ML/MIN) USED
BECKMAN 0630 ON MANUAL OPERATION (FLOW 120 ML/MIN); CO FACTOR: 1.6/13.4

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.2	
REL HUM	%	AVERAGE	69.12	
SSPOWER	KW	AVERAGE	15.26	
RADIOM	MW/CM2	AVERAGE	0.166	
H2O	PPM	AVERAGE	2.899E 04	
NO	PPM	INIT COND	0.520	
NO2-CORR	PPM	INIT COND	0.154	
M-XYL	PPM	INIT COND	0.494	*
CO	PPM	INIT COND	1.658	
ACETALD	PPM	INIT COND	0.001	
ACETONE	PPM	INIT COND	0.001	
METHANE	PPM	INIT COND	2.142	
ETHANE	PPM	INIT COND	0.008	
ETHENE	PPM	INIT COND	0.004	
ACETYLEN	PPM	INIT COND	0.006	
PROPANE	PPM	INIT COND	0.001	
BENZENE	PPM	INIT COND	0.001	

* ASSIGNED INITIAL CONDITION

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M-XYLENE
1978 NOV 30

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.237
430.	1.901
403.	1.717
380.	1.523
370.	1.352
360.	1.151
350.	1.000
340.	0.779
330.	0.531
320.	0.287
310.	0.098
300.	0.007
290.	0.0

K1=0.40 MIN-1

SAMPLING RATE = 1.761 L/MIN

42 ∞ SAMPLES TAKEN

EC -344
M-XYLENE
1978 NOV 30

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOx-CORR PPM	M-XYL PPM 10°C-600	M-XYL PPM SP 1000	M-XYL PPM 5° C-600
850	-40.	******	******	******	******	******	0.514	0.507
912	-18.	******	******	******	******	0.478	******	******
930	0.	0.000	0.520	0.154	0.671	0.486	******	0.499
935	5.	0.000	0.508	0.164	0.663	******	******	******
940	10.	0.000	0.471	0.192	0.661	******	******	******
945	15.	0.0	0.440	0.213	0.645	******	******	******
950	20.	0.000	0.386	0.256	0.637	******	******	******
955	25.	0.005	0.318	0.323	0.631	******	******	******
1000	30.	0.010	0.247	0.375	0.615	0.371	******	0.400
1005	35.	0.022	0.208	0.391	0.589	******	******	******
1010	40.	0.042	0.139	0.441	0.568	******	******	******
1015	45.	0.061	0.100	0.454	0.546	******	******	******
1020	50.	0.095	0.076	0.452	0.518	******	******	******
1025	55.	0.120	0.061	0.441	0.492	******	******	******
1030	60.	0.154	0.049	0.439	0.473	0.269	******	0.268
1035	65.	0.195	0.037	0.416	0.448	******	******	******
1040	70.	0.222	0.034	0.394	0.421	******	******	******
1045	75.	0.244	0.029	0.373	0.393	******	******	******
1050	80.	0.278	0.024	0.351	0.368	******	******	******
1055	85.	0.310	0.022	0.330	0.343	******	******	******
1100	90.	0.335	0.022	0.308	0.317	0.188	******	0.183
1105	95.	0.359	0.020	0.288	0.300	******	******	******
1110	100.	0.388	0.020	0.268	0.276	******	******	******
1115	105.	0.403	0.017	0.249	0.253	******	******	******
1120	110.	0.425	0.017	0.224	0.234	******	******	******
1125	115.	0.452	0.017	0.212	0.214	******	******	******
1130	120.	0.469	0.015	0.182	0.197	0.139	0.177	0.137
1200	150.	0.569	0.012	0.109	0.109	0.098	******	0.095
1230	180.	0.586	0.012	0.059	0.070	0.074	0.082	0.073
1300	210.	0.567	0.012	0.056	0.061	0.061	******	0.060
1330	240.	0.550	0.015	0.044	0.044	0.049	0.052	0.049
1400	270.	0.533	0.012	0.040	0.042	0.043	******	0.041
1430	300.	0.520	0.010	0.048	0.053	0.035	******	0.034
1500	330.	0.511	0.012	0.043	0.043	0.029	******	0.028
1530	360.	0.503	0.012	0.043	0.048	0.022	******	0.020

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CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	BUTYRAL PPM	MEK PPM	ME-N PPM	oZALD PPM 5' C-600	M-TOLALD PPM 5' C-600	METHANE PPM	ETHANE PPM
850	-40.	******	******	******	******	******	******	******	******	******	0.0012	0.0004	******	******
912	-18.	******	******	******	0.0009	0.0001	0.0001	0.0	0.0001	******	******	******	******	******
930	0.	1.86	0.000	0.0	0.0013	******	0.0005	0.0	0.0000	0.0	0.0002	0.0004	2.14	0.0076
935	5.	******	******	******	******	******	******	******	******	******	******	******	******	******
940	10.	******	******	******	******	******	******	******	******	******	******	******	******	******
945	15.	******	******	******	******	******	******	******	******	******	******	******	******	******
950	20.	******	******	******	******	******	******	******	******	******	******	******	******	******
955	25.	******	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.008	******	0.0022	0.0002	0.0019	0.0001	0.0	0.0003	0.0003	0.0048	******	******
1005	35.	******	******	******	******	******	******	******	******	******	******	******	******	******
1010	40.	******	******	******	******	******	******	******	******	******	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1020	50.	******	******	******	******	******	******	******	******	******	******	******	******	******
1025	55.	******	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	1.92	0.016	0.052	0.0037	******	0.0053	******	******	0.0009	0.0012	0.0067	******	******
1035	65.	******	******	******	******	******	******	******	******	******	******	******	******	******
1040	70.	******	******	******	******	******	******	******	******	******	******	******	******	******
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1050	80.	******	******	******	******	******	******	******	******	******	******	******	******	******
1055	85.	******	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.079	******	0.0060	******	0.0184	******	******	0.0013	0.0009	0.0052	******	******
1105	95.	******	******	******	******	******	******	******	******	******	******	******	******	******
1110	100.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******	******
1120	110.	******	******	******	******	******	******	******	******	******	******	******	******	******
1125	115.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	2.10	0.124	0.067	0.0079	******	0.0201	******	******	0.0013	0.0011	0.0092	******	******
1200	150.	******	0.146	******	0.0082	******	0.0127	******	******	0.0013	******	0.0066	******	******
1230	180.	2.20	0.175	0.073	0.0102	0.0035	0.0219	******	******	0.0015	0.0020	0.0067	2.14	0.0074
1300	210.	******	0.165	******	0.0098	******	0.0117	******	******	0.0014	0.0003	0.0070	******	******
1330	240.	2.25	0.175	0.092	******	******	0.0367	******	******	0.0013	0.0007	0.0072	******	******
1400	270.	******	0.174	******	0.0111	******	0.0094	******	******	0.0014	0.0010	0.0069	******	******
1430	300.	2.32	0.158	0.111	0.0128	0.0018	0.0175	******	******	0.0014	0.0016	0.0027	******	******
1500	330.	******	0.161	******	0.0130	0.0018	0.0183	******	******	0.0013	0.0005	0.0052	******	******
1530	360.	2.48	0.151	0.109	0.0131	0.0038	0.0189	******	******	0.0014	0.0004	0.0027	2.12	0.0073

EC -344
M-XYLENE
1978 NOV 30

CLOCK TIME	ELAPSED T(MIN)	ETHENE PPM	ACETYLEN PPM (PN)	ACETYLEN PPM (DMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM	N-C4 PPM	1-C4= PPM	BENZENE PPM	TOLUENE PPM
850	-40.	******	******	******	******	******	******	******	******	******	******
912	-18.	******	******	******	******	******	******	******	******	0.0002	0.000
930	0.	0.0041	0.0063	0.0031	0.0009	0.000	0.0001	******	0.0	0.0009	0.000
935	5.	******	******	******	******	******	******	******	******	******	******
940	10.	******	******	******	******	******	******	******	******	******	******
945	15.	******	******	******	******	******	******	******	******	******	******
950	20.	******	******	******	******	******	******	******	******	******	******
955	25.	******	******	******	******	******	******	******	******	******	******
1000	30.	******	******	******	******	******	******	******	******	0.0005	******
1005	35.	******	******	******	******	******	******	******	******	******	******
1010	40.	******	******	******	******	******	******	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******	******
1020	50.	******	******	******	******	******	******	******	******	******	******
1025	55.	******	******	******	******	******	******	******	******	******	******
1030	60.	******	******	******	******	******	******	******	******	0.0005	******
1035	65.	******	******	******	******	******	******	******	******	******	******
1040	70.	******	******	******	******	******	******	******	******	******	******
1045	75.	******	******	******	******	******	******	******	******	******	******
1050	80.	******	******	******	******	******	******	******	******	******	******
1055	85.	******	******	******	******	******	******	******	******	******	******
1100	90.	******	******	******	******	******	******	******	******	0.0005	******
1105	95.	******	******	******	******	******	******	******	******	******	******
1110	100.	******	******	******	******	******	******	******	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******	******
1120	110.	******	******	******	******	******	******	******	******	******	******
1125	115.	******	******	******	******	******	******	******	******	******	******
1130	120.	******	******	******	******	******	******	******	******	******	******
1200	150.	******	******	******	******	******	******	******	******	0.0065	******
1230	180.	0.0028	0.0068	0.0041	0.0008	0.000	0.0001	0.0001	0.0001	0.0065	******
1300	210.	******	******	******	******	******	******	******	******	0.0085	******
1330	240.	******	******	******	******	******	******	******	******	0.0085	******
1400	270.	******	******	******	******	******	******	******	******	0.0	******
1430	300.	******	******	******	******	******	******	******	******	******	******
1500	330.	******	******	******	******	******	******	******	******	******	******
1530	360.	0.0021	0.0063	0.0050	0.0007	0.000	0.0001	0.0001	0.0001	******	******

EC -344
M-XYLENE
1976 NOV 30

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MW/CM2	HCHO VOL L	TENX VOL L
850	-40.	******	******	******	******	******	9.75
912	-18.	******	******	******	******	******	******
930	0.	83.3	57.0	15.19	0.171	20.00	******
935	5.	85.0	57.5	******	0.176	******	******
940	10.	84.5	59.0	******	0.171	******	******
945	15.	84.8	61.0	******	0.169	******	******
950	20.	85.0	62.5	******	0.169	******	******
955	25.	84.8	64.0	******	0.166	******	******
1000	30.	85.2	65.5	******	0.166	******	******
1005	35.	85.0	66.5	******	0.169	******	******
1010	40.	85.5	67.5	******	0.166	******	******
1015	45.	85.2	68.5	******	0.165	******	******
1020	50.	85.2	69.0	******	0.164	******	******
1025	55.	85.0	69.0	******	0.169	******	******
1030	60.	85.0	69.5	15.42	0.169	20.00	11.55
1035	65.	85.5	69.5	******	******	******	******
1040	70.	86.0	69.5	******	******	******	******
1045	75.	86.0	69.5	******	******	******	******
1050	80.	86.2	69.5	******	******	******	******
1055	85.	86.7	69.5	******	******	******	******
1100	90.	86.0	69.5	******	******	******	******
1105	95.	86.2	69.5	******	******	******	******
1110	100.	86.5	69.5	******	******	******	******
1115	105.	87.4	69.5	******	******	******	******
1120	110.	86.7	69.5	******	******	******	******
1125	115.	87.7	69.5	******	******	******	******
1130	120.	86.7	69.5	15.25	0.169	20.00	10.50
1200	150.	87.9	69.5	******	******	******	******
1230	180.	86.7	70.5	15.17	0.166	20.00	12.06
1300	210.	85.7	70.5	******	0.161	******	******
1330	240.	85.5	70.5	14.86	0.159	20.00	10.05
1400	270.	85.5	70.5	******	******	******	******
1430	300.	86.0	70.5	15.25	0.166	20.00	10.04
1500	330.	86.0	70.5	******	******	******	******
1530	360.	86.2	70.0	15.66	0.176	20.00	******

EC -345
M-XYLENE
1978 DEC 1

BEGIN IRRADIATION 0930; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
C2-N PRESENT BUT DOES NOT EXCEED 1 PPB
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TOLUALD MEASUREMENT ON SP-1000 NOT REPORTED BECAUSE OF INTERFERING PEAK
PORAPAK-N (PN) INSTRUMENT PROBLEMS. VALUES PROBABLY ARE 40% HIGH
M-XYLENE VALUES FROM 5' & 10' C-600 COLUMNS PREFERRED OVER THOSE FROM SP-1000
M-XYLENE INJECTED BY FLUSHING IN .4020 TORR IN 5.467 LITER BULB
CALCULATED INITIAL M-XYLENE = .5014 PPM
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
BRADY 1193X, DASIBI 1212 (530 ML/MIN), TECO 146-1 (540 ML/MIN) USED
BECKMAN 6800 ON MANUAL OPERATION (120 ML/MIN); CO FACTOR 1.6/14.8

T=0 AT 930 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	303.1
REL HUM	%	AVERAGE	60.76
SSPOWER	KW	AVERAGE	14.97
RADIOM	MW/CM2	AVERAGE	0.161
H2O	PPM	AVERAGE	2.521E 04
NO	PPM	INIT COND	0.220
NO2-CORR	PPM	INIT COND	0.059
M-XYL	PPM	INIT COND	0.480
CO	PPM	INIT COND	5.206
HCHO	PPM	INIT COND	0.002
ETHANE	PPM	INIT COND	0.007
ETHENE	PPM	INIT COND	0.004
ACETYLEN	PPM	INIT COND	0.006
PROPANE	PPM	INIT COND	0.001

* ASSIGNED INITIAL CONDITION

EC -345
M-XYLENE
1978 DEC 1

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.257
430.	1.924
403.	1.743
380.	1.528
370.	1.354
360.	1.140
350.	1.000
340.	0.772
330.	0.528
320.	0.280
310.	0.096
300.	0.007
290.	0.0

K1=0.39 MIN-1

SAMPLING RATE = 1.664 L/MIN

42 GC SAMPLES TAKEN

EC -345
M-XYLENE
1978 DEC 1

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOX-CORR PPM	M-XYL PPM 10'C-600	M-XYL PPM 5' C-600	M-XYL PPM SP 1000
850	-40.	******	******	******	******	******	******	******
905	-25.	******	******	******	******	******	0.478	0.465
930	0.	0.0	0.220	0.059	0.278	0.480	******	******
935	5.	0.002	0.205	0.069	0.273	******	******	******
940	10.	0.005	0.164	0.103	0.266	******	******	******
945	15.	0.017	0.123	0.131	0.253	******	******	******
950	20.	0.042	0.062	0.181	0.241	******	******	******
955	25.	0.093	0.032	0.192	0.224	******	******	******
1000	30.	0.149	0.023	0.179	0.201	0.338	0.350	******
1005	35.	0.208	0.016	0.160	0.173	******	******	******
1010	40.	0.256	0.012	0.143	0.152	******	******	******
1015	45.	0.303	0.011	0.124	0.132	******	******	******
1020	50.	0.342	0.009	0.103	0.110	******	******	******
1025	55.	0.364	0.007	0.087	0.095	******	******	******
1030	60.	0.381	0.007	0.076	0.081	0.228	0.237	0.209
1045	75.	0.396	0.007	0.046	0.053	******	******	******
1100	90.	0.386	0.007	0.026	0.031	0.154	0.199	******
1115	105.	0.376	0.006	0.022	0.026	******	******	******
1130	120.	0.366	0.007	0.021	0.025	0.175	0.177	0.177
1200	150.	0.354	0.007	0.026	0.031	0.161	0.162	******
1230	180.	0.342	0.006	0.023	0.027	0.146	0.142	0.156
1300	210.	0.332	0.007	0.028	0.031	0.126	0.132	******
1330	240.	0.327	0.007	0.028	0.032	0.116	0.111	0.115
1400	270.	0.322	0.007	0.024	0.029	0.102	0.101	******
1430	300.	0.320	0.006	0.025	0.028	0.094	0.091	******
1500	330.	0.318	0.005	0.025	0.031	******	0.082	******
1530	360.	0.318	0.006	0.027	0.031	0.073	0.072	0.088

EC -345
M-XYLENE
1978 DEC 1

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	ME-N PPM	BZALD PPM 5' C-600	M-TOLALD PPM 5' C-600	METHANE PPM (PN)	ETHANE PPM (PN)	ETHENE PPM (PN)
850	-40.	******	******	******	******	******	******	******	******	******	******	******	******
905	-25.	******	******	******	******	******	******	******	0.0011	0.0002	******	******	******
930	0.	5.21	0.000	0.002	******	******	******	0.0	******	******	******	0.0072	0.0043
935	5.	******	******	******	******	******	******	******	******	******	******	******	******
940	10.	******	******	******	******	******	******	******	******	******	******	******	******
945	15.	******	******	******	******	******	******	******	******	******	******	******	******
950	20.	******	******	******	******	******	******	******	******	******	******	******	******
955	25.	******	******	******	******	******	******	******	******	******	******	******	******
1000	30.	******	0.023	******	0.0026	0.0011	0.0075	0.0002	0.0007	0.0060	******	******	******
1005	35.	******	******	******	******	******	******	******	******	******	******	******	******
1010	40.	******	******	******	******	******	******	******	******	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******	******	******	******
1020	50.	******	******	******	******	******	******	******	******	******	******	******	******
1025	55.	******	******	******	******	******	******	******	******	******	******	******	******
1030	60.	5.27	******	0.030	0.0050	0.0017	0.0132	0.0004	0.0002	0.0087	******	******	******
1045	75.	******	******	******	******	******	******	******	******	******	******	******	******
1100	90.	******	0.103	******	0.0063	0.0017	0.0118	******	0.0004	0.0109	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******	******	******	******
1130	120.	5.40	0.107	0.060	0.0080	0.0022	0.0116	******	0.0012	0.0115	******	******	******
1200	150.	******	0.098	******	0.0089	******	0.0208	0.0002	0.0010	0.0090	******	******	******
1230	180.	5.56	0.102	******	0.0096	******	0.0223	0.0005	0.0013	0.0092	3.08	0.0073	0.0032
1300	210.	******	0.095	******	0.0105	******	0.0169	0.0005	0.0009	0.0128	******	******	******
1330	240.	5.72	0.090	0.124	0.0117	0.0021	0.0166	0.0005	0.0015	0.0083	******	******	******
1400	270.	******	0.092	******	0.0127	0.0022	0.0159	0.0005	0.0002	0.0090	******	******	******
1430	300.	5.78	0.087	0.120	0.0129	0.0022	0.0183	0.0005	0.0014	0.0077	******	******	******
1500	330.	******	0.084	******	0.0138	0.0023	0.0185	0.0006	0.0009	0.0067	******	******	******
1530	360.	5.99	0.081	0.136	0.0144	******	0.0181	0.0006	0.0002	0.0060	3.08	0.0070	0.0029

EC -345
N-XYLENE
1978 DEC 1

CLOCK TIME	ELAPSED T(MIN)	ACETYLEN PPM (PN)	ACETYLEN PPM (CMS)	PROPANE PPM	PROPENE PPM	I-C4 PPM	N-C4 PPM	I-C5 PPM	BENZENE PPM	TOLUENE PPM 10*C-600
850	-40.	******	******	******	******	******	******	******	******	******
905	-25.	******	******	******	******	******	******	******	******	******
930	0.	0.0063	0.0038	0.0009	0.0002	0.0000	0.0000	0.0	0.0002	0.000
935	5.	******	******	******	******	******	******	******	******	******
940	10.	******	******	******	******	******	******	******	******	******
945	15.	******	******	******	******	******	******	******	******	******
950	20.	******	******	******	******	******	******	******	******	******
955	25.	******	******	******	******	******	******	******	******	******
1000	30.	******	******	******	******	******	******	******	******	******
1005	35.	******	******	******	******	******	******	******	******	******
1010	40.	******	******	******	******	******	******	******	******	******
1015	45.	******	******	******	******	******	******	******	******	******
1020	50.	******	******	******	******	******	******	******	******	******
1025	55.	******	******	******	******	******	******	******	******	******
1030	60.	******	******	******	******	******	******	******	******	******
1045	75.	******	******	******	******	******	******	******	******	******
1100	90.	******	******	******	******	******	******	******	******	******
1115	105.	******	******	******	******	******	******	******	******	******
1130	120.	******	******	******	******	******	******	******	******	******
1200	150.	******	******	******	******	******	******	******	******	******
1230	180.	0.0074	0.0047	0.0009	0.0001	0.0001	0.0001	0.0002	******	******
1300	210.	******	******	******	******	******	******	******	******	******
1330	240.	******	******	******	******	******	******	******	******	******
1400	270.	******	******	******	******	******	******	******	******	******
1430	300.	******	******	******	******	******	******	******	******	******
1500	330.	******	******	******	******	******	******	******	******	******
1530	360.	0.0089	0.0056	0.0008	0.0001	0.0001	0.0001	0.0	******	******

EC -345
M-XYLENE
1978 DEC 1

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	SSPOWER KW	RADIOM MR/CM2	HCHO VOL L	TENX VOL L
850	-40.	******	******	******	******	******	******
905	-25.	******	******	******	******	******	10.05
930	0.	84.0	50.5	14.98	0.166	20.00	******
935	5.	84.8	51.0	******	0.169	******	******
940	10.	84.3	52.5	******	0.166	******	******
945	15.	84.5	53.5	******	0.166	******	******
950	20.	84.8	55.0	******	0.161	******	******
955	25.	84.0	56.0	******	0.161	******	******
1000	30.	84.0	57.0	******	0.164	******	******
1005	35.	85.0	58.0	******	0.161	******	******
1010	40.	84.3	59.0	******	0.161	******	******
1015	45.	85.0	59.5	******	0.164	******	******
1020	50.	85.2	60.0	******	0.161	******	******
1025	55.	85.2	60.5	******	0.161	******	******
1030	60.	84.3	61.0	14.83	0.156	20.00	10.57
1045	75.	84.8	61.5	******	******	******	******
1100	90.	85.5	62.0	******	******	******	******
1115	105.	85.2	62.0	******	******	******	******
1130	120.	85.7	61.5	14.58	0.159	20.00	10.50
1200	150.	86.2	61.5	******	******	******	******
1230	180.	86.2	62.0	15.05	0.159	******	11.93
1300	210.	86.0	62.0	******	0.164	******	******
1330	240.	86.5	62.0	15.17	0.159	20.00	10.50
1400	270.	86.7	62.0	******	******	******	******
1430	300.	87.0	61.5	15.01	0.159	20.00	11.39
1500	330.	87.0	61.5	******	0.161	******	******
1530	360.	86.7	61.0	15.17	0.164	20.00	10.05

EC -346
M-XYLENE
1978 DEC 6

6EGIN IRRADIATION 1030; 0.25 INCH PYREX FILTER; TRICHROIC FILTER OUT
TWO HOUR RUN
NO 03 DATA RECORDED UNTIL 1111
SP 1000 IS 6' 0.1% SP 1000/CARBOPAK C
5' C-600 IS 5' 5% C-600/C-22 COLUMN
10' C-600 IS 10' 10% C-600/C-22 COLUMN
BENZALDEHYDE VALUES FOR SP-1000 UNCERTAIN. 5' C-600 DATA PREFERRED
TOLUALD MEASUREMENT ON SP-1000 NOT REPORTED BECAUSE OF INTERFERING PEAK
M-XYLENE VALUES FROM 5' & 10' C-600 COLUMNS PREFERRED OVER THOSE FROM SP-1000
M-XYLENE INJECTED BY FLUSHING IN .4010 TORR IN 5.407 LITER BULB.
CALCULATED INITIAL M-XYLENE = .5002 PPM
TIME INDICATED FOR TENAX SAMPLE IS START OF 15 MINUTE COLLECTION
6RADY 1193X; DASIBI 1212 (530 ML/MIN); TECO 148-1 (540 ML/MIN) USED
6ECKMAN 6600 ON MANUAL OPERATION (FLOW 120 ML/MIN); CO FACTOR: 1.6/14.0

T=0 AT 1030 PST

	CALIB#
PAN	9
HCHO	3
REL INT	4

TS	DEG K	AVERAGE	304.2	
REL HUM	%	AVERAGE	59.57	
SSPOWER	KW	AVERAGE	15.44	
RADIOM	MW/CM2	AVERAGE	0.170	
H2O	PPM	AVERAGE	2.653E 04	
NO	PPM	INIT COND	0.204	
NOX-CORR	PPM	INIT COND	0.059	
M-AYL	PPM	INIT COND	0.494	*
CO	PPM	INIT COND	0.798	
HCHO	PPM	INIT COND	0.006	
ACETALD	PPM	INIT COND	0.001	
BZALD	PPM	INIT COND	0.001	
METHANE	PPM	INIT COND	1.306	
ETHANE	PPM	INIT COND	0.004	
ETHENE	PPM	INIT COND	0.004	
ACETYLEN	PPM	INIT COND	0.006	
PROPANE	PPM	INIT COND	0.001	

* ASSIGNED INITIAL CONDITION

EC -346
M-XYLENE
1978 DEC 8

SPECTRAL DISTRIBUTION: WAVELENGTH(NM)	REL. INTENSITY
500.	2.193
430.	1.891
403.	1.699
380.	1.518
370.	1.346
360.	1.147
350.	1.000
340.	0.774
330.	0.539
320.	0.281
310.	0.097
300.	0.007
290.	0.0

KI=0.39 MIN-1

SAMPLING RATE = 1.754 L/MIN

15 GC SAMPLES TAKEN

EC -346
M-XYLENE
1978 DEC 8

CLOCK TIME	ELAPSED T(MIN)	OZONE PPM	NO PPM	NO2-CORR PPM	NOx-CORR PPM	M-XYL PPM 10'C-600	M-XYL PPM 5' C-600	M-XYL PPM SP 1000
1005	-25.	******	******	******	******	0.493	0.482	******
1030	0.	******	0.204	0.059	0.261	0.486	0.507	******
1035	5.	******	0.193	0.066	0.257	******	******	******
1100	30.	******	******	******	******	0.321	0.320	******
1105	35.	******	0.022	0.118	0.139	******	******	******
1110	40.	******	0.021	0.097	0.117	******	******	******
1115	45.	0.340	0.020	0.081	0.098	******	******	******
1120	50.	0.366	0.017	0.069	0.085	******	******	******
1125	55.	0.384	0.017	0.053	0.067	******	******	******
1130	60.	0.384	0.016	0.043	0.056	0.217	0.221	0.219
1145	75.	0.381	0.020	0.031	0.049	******	******	******
1200	90.	0.362	0.015	0.018	0.032	0.161	0.179	******
1215	105.	0.352	0.013	0.017	0.028	******	******	******
1230	120.	0.342	0.012	0.015	0.026	0.158	0.157	0.177

EC -346
M-XYLENE
1976 DEC 6

CLOCK TIME	ELAPSED T(MIN)	CO PPM	PAN PPM	HCHO PPM	ACETALD PPM	PROPALD PPM	ACETONE PPM	MEK PPM	ME-N PPM	C2-N PPM	BZALD PPM	M-TOLALD PPM 5' C-000	METHANE PPM	ETHANE PPM
1005	-25.	******	******	******	0.0008	0.0001	0.0006	0.0002	******	******	0.0031	0.0007	******	******
1030	0.	0.80	0.000	0.006	0.0007	******	0.0005	******	0.0	0.0	0.0009	0.0	1.31	0.0040
1035	5.	******	******	******	******	******	******	******	******	******	******	******	******	******
1100	30.	******	0.036	******	0.0029	0.0015	0.0177	******	0.0004	0.0001	0.0008	0.0072	******	******
1105	35.	******	******	******	******	******	******	******	******	******	******	******	******	******
1110	40.	******	******	******	******	******	******	******	******	******	******	******	******	******
1115	45.	******	******	******	******	******	******	******	******	******	******	******	******	******
1120	50.	******	******	******	******	******	******	******	******	******	******	******	******	******
1125	55.	******	******	******	******	******	******	******	******	******	******	******	******	******
1130	60.	1.01	0.081	0.051	0.0051	******	0.0260	******.	0.0006	0.0002	0.0008	0.0094	******	******
1145	75.	******	******	******	******	******	******	******	******	******	******	******	******	******
1200	90.	1.07	0.101	******	0.0068	******	0.0257	******	0.0003	0.0002	0.0015	0.0104	******	******
1215	105.	******	******	0.074	******	******	******	******	******	******	******	******	******	******
1230	120.	1.14	0.102	******	0.0087	0.0026	0.0181	******	0.0007	0.0002	0.0016	0.0097	1.30	0.0039

EC -346
M-XYLENE
1978 DEC 8

CLOCK TIME	ELAPSED T(MIN)	ETHENE PPM	ACETYLEN PPM PN	ACETYLEN PPM DMS	PROPANE PPM	PROPENE PPM	I-C4 PPM	BENZENE PPM
1005	-25.	******	******	******	******	******	******	0.0002
1030	0.	0.0041	0.0055	0.0071	0.0008	0.000	0.0	0.0002
1035	5.	******	******	******	******	******	******	******
1100	30.	******	******	******	******	******	******	******
1105	35.	******	******	******	******	******	******	******
1110	40.	******	******	******	******	******	******	******
1115	45.	******	******	******	******	******	******	******
1120	50.	******	******	******	******	******	******	******
1125	55.	******	******	******	******	******	******	******
1130	60.	******	******	******	******	******	******	******
1145	75.	******	******	******	******	******	******	******
1200	90.	******	******	******	******	******	******	******
1215	105.	******	******	******	******	******	******	******
1230	120.	0.0029	0.0059	0.0076	0.0007	0.000	0.0001	******

EC -346
M-XYLENE
1978 DEC 8

CLOCK TIME	ELAPSED T(MIN)	TS DEG F	REL HUM %	BAROMETER KA	RADIOM MR/CM2	HCHO VOL L	TENX VOL L
1005	-25.	******	******	******	******	******	11.50
1030	0.	84.3	57.0	15.78	0.181	20.00	******
1035	5.	87.2	57.0	******	0.178	******	******
1100	30.	******	******	******	******	******	******
1105	35.	86.5	60.0	******	0.173	******	******
1110	40.	86.5	60.0	******	0.171	******	******
1115	45.	87.0	60.5	******	0.173	******	******
1120	50.	87.4	60.5	******	0.176	******	******
1125	55.	87.7	60.0	******	0.171	******	******
1130	60.	88.2	60.0	15.29	0.169	20.00	13.02
1145	75.	89.6	55.0	******	0.169	******	******
1200	90.	88.9	59.5	******	0.166	******	******
1215	105.	89.2	60.0	******	0.171	20.00	******
1230	120.	88.9	60.0	15.25	0.166	******	10.50

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